



Capable Couples

encouraging healthy financial
conversations between couples

Jessica Weeden



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Carnegie Mellon University, for the degree of Master of Design
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Date of Submission

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Discussion of money has become stigmatized in American culture. Money affects lifestyle, sense of security or one's own sense of self worth, making conversations about so much more than just finances. Left alone, this can lead partners to develop a sense of resentment, mistrust or confusion about their joint financial situation.

Combining information from user research, casual conversations, observations of those around me, and the current literature on marital conflict and money management, this project aims to provide a way for younger couples to approach financial conversations in a way that reduces the anxiety that often comes with the territory.

I approached this by designing a game for the couple to play as a means of prompting discussion. By creating a game that fosters a comfortable, casual environment, they can learn and plan alongside each other while feeling cooperative rather than competitive or defensive.

In this way, I am able to raise serious financial questions for the couple to consider moments after they are laughing about what cartoon character they most resemble. This shifts the focus from dread and tension to learning and strengthening their bond.



ACKNOWLEDGEMENTS

First and foremost, I would like to thank my advisors, John Zimmerman and Jodi Forlizzi, for their encouragement, words of wisdom and course correction when I started to wander beyond the scope of my project.

Thank you to my fellow students for late night commiseration in the studio and their support of my decisions, especially Vinita Israni and Jacklynn Pham.

Endless thanks to all of my couples for being game to try out my ideas and letting me listen in on your personal conversations. May you all have an excellent future together.

Finally, thank you to my family. I love you. Mom, thanks for listening to the long ranting phone calls, always asking if I'm eating, and your efforts to understand the work I do even though I'm awful at explaining it. Rob, thank you for being the other half of our own capable couple. This project does not mean I will handle all our finances from here on out.



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Marriage is not an easy undertaking and there are many number of pitfalls couples can run into. Marriages are most at risk of divorce during the early years with 20 percent of first marriages typically ending within the first 5 years (Copen, et al, 2012).

One of these pitfalls is learning to communicate about difficult topics, such as finances. Money habits and planning affect a large portion of how a couple live and will move into the future so open, healthy discussion is needed to sustain a lasting marriage. This doesn't always happen though because of how private, personal and emotional money can be for some people.

Studies have revealed that marital conflicts about money are "more pervasive, problematic, and recurrent, and remain unresolved, despite including more attempts at problem solving" (Papp et al., 2009). This stems in part from the fact that money is representative of many things. Couples know they need to talk about their finances. However, they are often uncertain about how to begin such a conversation. They are anxious about financial matters so avoid speaking to each other about it.

The most well known assistance for this problem is premarital counseling which often addresses financial issues such as debt and how to discuss them. However, the vast majority of counselors are tied to a religious institution and the number of people associated with a religion is declining, especially among millennials. It also requires trusting another person to come inside some of the more private details of the relationship and this is unappealing for the more private couples.

Other tools available, often through financial advisors, are not specifically designed for couples and don't seek to guide a conversation so much as raise new ideas all at once and leave the discussion up to the couples discretion.

The goal of this project was to help overcome the hurdle of entering into a conversation and keeping it going in a productive, deep, and well-rounded way. I designed a conversation-facilitating tool that offers an entry point and guide through such conversations so that young couples who do decide to commit to each other are less likely to fight about money in the future. In dealing with the multiple facets of a person's and a couple's relationship with money,

the conversation can successful occur without intervention from an outside source.

In this project This projects looks at the ways in which people can relate to money and how that affects their habits and attitudes. It considers emotions and posture when approaching a difficult conversation and the nature of martial financial fights to consider how to overcome them.



A good deal of research has been done in the space of marital conflict, particularly surrounding money. Research has proven that financial conflicts in marriage are especially pervasive (Papp, 2009). The concern over conflict has risen as the traditional model of a male breadwinner role has diminished in prevalence (Yodanis & Lauer, 2007). Monetary conflict is a constant across all incomes level (Dew, 2012), in part because money is always limited and deprivation is relative. (Papp, 2009). A good deal of the literature focuses on how couples manage their money. Some research suggests that segregated assets are associated with lower expectations for marital continuity, fewer investments unique to the relationship, and ease in measuring contributions to the marriage (Treas, 1993).

RELAVENT LITERATURE

AREAS OF FINANCIAL CONFLICT

Early research revealed that money conflicts were pervasive (Papp, 2009). However, in order tackle a way to overcome damaging conflict, I needed to understand what areas caused the greatest conflict. The most common areas of conflict are debt, and blame/hostility for overspending, savings, and perceived inequality of access to money (Dew, 2011).

INCOME AGNOSTIC

As I considered who this project may affect, it was important to consider the amount financial conflict compared to the amount of money a couple has. Research has found that, after “controlling for income, education, assets, and consumer debt, that financial conflict is associated with the likelihood of divorce at all levels of the socioeconomic continuum” (Dew, 2012). Money is always limited in some ways and wants will expand to use the money that is available (Papp, 2009).

PERSONALITIES

Many have tried to categorize money approaches or personalities. The Money Ethics Scale offers a wide range of meanings people attach to money, both positive and negative, such as viewing money as attractive or money as shameful (Thomas, 1993).

In more recent years, some have sought to consolidate the potential attitudes. The couple counseling tool Prepare-Enrich, offers four categories for viewing money: as security, as status, as control, or as enjoyment. There are a lot of overlap, and people are often fluid in their attitudes as circumstances and mood changes. However, it was a key insight for me to understand that these attitudes manifest in how people handle and relate to their money in ways that they are not consciously aware of and so don't, or can't, communicate their motives to their partner.

This is a problem because on a very basic level, it's been found that "spousal [spending and saving] differences could be even more influential than actual financial outcomes (savings and credit card debt), which are typically significant predictors of marital conflict over money" (Rick, 2011).

RELAVENT PROJECTS

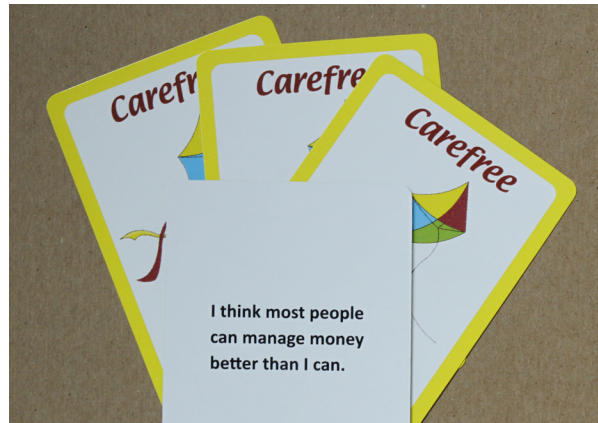
MONEY HABITUDES

The Money Habitude Card Set is a tool used by financial advisors to help clients surface their money habits and attitudes. It works by sorting a series of scenarios (e.g. “I feel the need to purchase something when it is on sale.”) into three different categories: “That’s Me!”, “Sometimes, it depends...”, and “That’s not me!”. On the back of each card, one of six personality types is indicated (spontaneous, security, status, giving, carefree and planning). Once the user has sorted the full deck of 54 cards, they look at the ones that are “very like me” to see which types occur the most frequently and then read a description about what that personality type means. The advisor can then use this information to engage in a conversation.

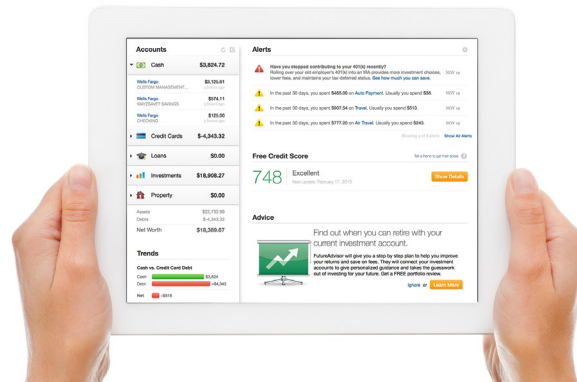
The cards can be used as a tool for couples, but they each need a deck of the cards to understand their own information and conversation grows from each person’s results, and would require a professional to facilitate the conversation (Solomon, 2012).



Examples of Money Habitude Cards

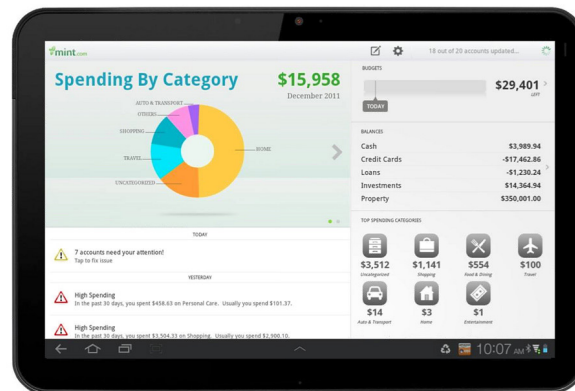


Account monitoring and
spending tracker on Mint.com



MINT

Mint is a digital tool designed for individuals to understand their own financial picture, identify trends in spending and plan for the future. The visualizations that the site uses is a great way for people to understand financial issues that aren't readily apparent if just looking at the numbers. It is a widely used tool that is optimized for regular use. However, it doesn't facilitate couple usage. Unless a couple has a joint account, they are unable to see their shared finances at a single time, and even then it doesn't differentiate between who is spending what. A large benefit of Mint is the current real data and may be used as a tool to assist in discussion.



PREMARITAL COUNSELING

Counseling is an excellent resource for many couples to discuss difficult topics that will affect their future together. A trained professional is able to mediate and make sure topics are discussed in a fruitful way. Talking about finances is often one facet of this service. However, access to counseling may be limited. A large majority of premarital counselors are associated with religious institutions, which is a barrier for the one in four Americans, ages 18–29, who say they are not currently affiliated with any particular religion (Pew, 2007). The counselors not affiliated with a religion come at a cost, which is an additional expense a couple may not be willing to spend.



This project began with the goal of developing a tool to help couples manage their finances. However, over the course of the research it became clear that what couples really needed was a system that could scaffold them in having a conversation about their values and the state of their finances. Below I detail the specific methods I employed in this research.

EXPERT INTERVIEWS

I interviewed two experts, one a premarital counselor and one a former financial advisor. I chose to interview experts because they were able to offer professional insight into how to guide couples through complicated financial discussions and decisions.

I conducted an expert interview with an employee of TWOgether Pittsburgh who had nearly 10 years of experience as a marriage counselor. One of the major findings from this interview was that younger couples typically have a harder time going through counseling. Older couples are more aware of their own and each other's financial status, what works and doesn't work for them, and how to plan for the future. Young couples don't have this real life experience and so there are more issues as they talk together.

Another insight that was later reinforced was the method of "genograms" — looking at how previous generations handled money as a way of assessing what may work for the couple. This is done to alleviate some of the tension or defensiveness that may arise if assessing one's

own methods. By looking at one's own family however, there is still an emotional connection and understanding that is often lacking in financial management advice.

Lastly, he introduced me to the concept of money personalities, or the idea that people fundamentally view and relate to money in different ways which affects how they spend and save. Understanding your own money personality as well as your partner's can shed a new light on existing or potential future problems.

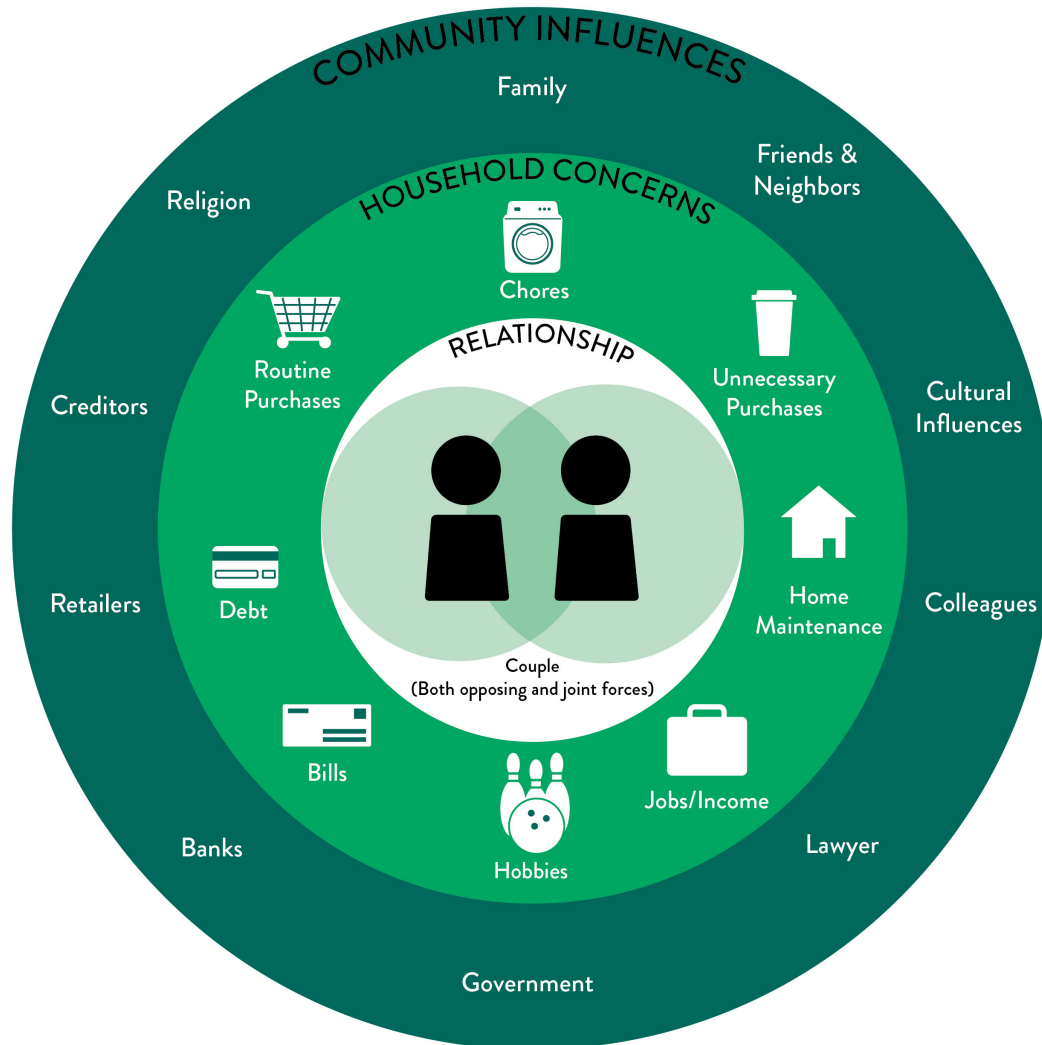
The former financial advisor, who specialized in helping couples who had recently come into money, emphasized the importance of keeping the couple on the same team, and not as opponents. A common method he used was having the couple look at how their respective grandparents had managed their finances, similar to the genograms, and discuss how that method would or wouldn't work for them. He described a triangle, where in the couple is starting from two points, but looking to a single future together as opposed to competing views based on personal interest.

DIAGRAMMING

After an extensive literature review and expert interviews, I needed to find the common themes and identify design opportunities. Therefore, I chose to visualize the ideas that had arisen to provide a way to see the whole picture.

A territory map helped me to begin to understand the factors that affect how each couple handle their money. This helped me understand the number of external forces that influence private habits and decisions.

I also wanted to see how different money personalities may work and relate to each other. I created a mapping of the different types and sought to organize and categorize. There are some overlapping and directly oppositional views, but people may take up any or all of these personalities as different times and in different situations. This served to underscore for me that money, though often treated in cold hard numbers, is imbued with many emotions and not only is talking about it difficult for couples, it would be difficult to talk about details with me.



Territory Map of the who and what influences a couple's financial life

Attitudes toward Money

Categories

- Cognitive (achievement, input, freedom, power)
- Affective (good + evil)
- Behavioral (wages)

Types

- as control
 - is a motivator
 - is freedom
 - is power
- as status
 - is honorable
 - represents success
 - represents achievement
 - demands respect
- as engagement
 - is attractive
 - is important
- as security
 - is valuable
 - is good
- as a bad thing
 - is shameful
 - is stressful
 - is useless
 - is evil

Views

- is a motivator
- is freedom
- is honorable
- represents success
- is attractive
- is valuable
- is shameful
- is stressful
- is useful
- is evil
- is power
- represents achievement
- demands respect
- is important
- is good

Money is always mixed

always want more, immediately adjust to increase

Can fluctuate

Status 😊	Engagement 😊
Control 😊	Security 😊

Possible to view as enjoyment + control?

Where do neg. feelings fit?

PLAY PURCHASING ACTIVITY & OBSERVATION

Since talking about money is a personal topic, I knew early on that I wanted to not just talk to people about how they made purchasing decisions together, but I wanted to observe them doing so. This presented a few problems. The first was that these conversations don't typically happen all at once and are rarely planned so it is hard to find and capture these moments. The second was the issues of sensitivity about hearing real financial numbers that couples aren't eager to share with a researcher. To circumvent these

problems, I developed a play scenario for the couples to work through. In this way, they could comfortably talk about the financial data together without having to reveal information about their personal lives.

I provided a set of consistent financial information and presented them with three different financial decisions of varying sizes. I told the couple to work through the decisions together as themselves just with these finances. I was then able to watch how each couple tackles the decisions.

PARTICIPANTS

Gender & Age	Engaged?	Living status	Years Together
Male, 28 and Female, 27	yes	together	6
Male, 26 and Female, 27	no	together	9
Male 28, and Female, 27	no	together	8
Male, 26 and Female, 24	no	together	2

The first decision was to choose one of four apartments. They were of varying sizes, costs, and distances from each person's work. Once they had selected an apartment, I provided a new card that reflected the costs of living in that apartment and asked them to select a car. Finally, they were asked to choose a set of living room furniture.

They were also told they were trying to save to go to a friend's wedding on the other side of the country. They could choose to give up on that goal to buy more expensive things or prioritize the wedding and purchase cheaper items.

This activity helped reveal some value differences between the partners. Some clearly preferred comfort and nicer things over saving money, while some preferred to err on the side of caution and savings. It became a common theme to see the more dominant or vocal partner prevail when it came time to make the final decision.

See Appendix A for materials used.

USER/COUPLE INTERVIEWS

After the purchasing activity, I interviewed them about their real financial lives and how they handled decision-making. I was seeking to get the user perspective as well as observe how they talked with each other. I chose to interview couples together so that I not only learned their thoughts on my questions, but also could observe the way they interacted and body language as an indicator of (dis)comfort when talking about personal finances.

All couples were in their 20s and had been together for an average of 6 years and were either living together, engaged or both. It was in these interviews that I surfaced a trend of partner's being more critical of each other's habits and less reflective of their own.

When asked to identify what each thought of as their partner's worst financial habit was, each could rarely predict what the other would say. This prompted me to consider how to build in an opportunity for self-reflection in addition to reflection on each other's underlying views on money.



Couples discussing which purchase decision to make together during play testing.





Considering my findings, one of my initial concepts was to create a way for couples to experience the benefits of marriage counseling in the comfort of their own home, especially since one of the key findings from my initial research was that couples' discomfort increased when trying to talk in front of each other.

A key aspect to making this work would be to verify that the source is trusted. In order for a counselor to be effective, the couple has to trust that they are a reliable source of information and capable guide as they navigate tricky topics. The issue with this model today is that fewer people are going to church, when clergy are the most common premarital counselors. A number of the couples I spoke with said they had talked about going to premarital counseling "or something" but hadn't taken active steps to do so. And even those who had gone, described the experience as helpful, but still experienced dread as they went to see the counselor. Consequently, these venues may not be the best place for couples to discuss financial matters as they are emotionally laden.

CONSIDERED DESIGN DIRECTIONS

By creating a sort of 'counselor in a box', I could potentially allow couples to assess financial issues in the comfort of their own home and not force them to talk through difficult issues in front of an audience.

As I considered other possible design directions, I knew one of the major issues I needed to address was the tension and anxiety surrounding these conversations. As a means of helping to alleviate these negative feelings, I chose to explore using game mechanics to facilitate the process of communicating about financial goals.

The first game I imagined was an analog board game that would draw the couple through three different stages:

- 1) education, or learning about financial basics. This would enable the couple to have knowledgeable conversations and be assured that they are on equal footing.
- 2) case studies, or a series of scenarios in which other couples handle situations in a variety of ways so the couple could see what their own

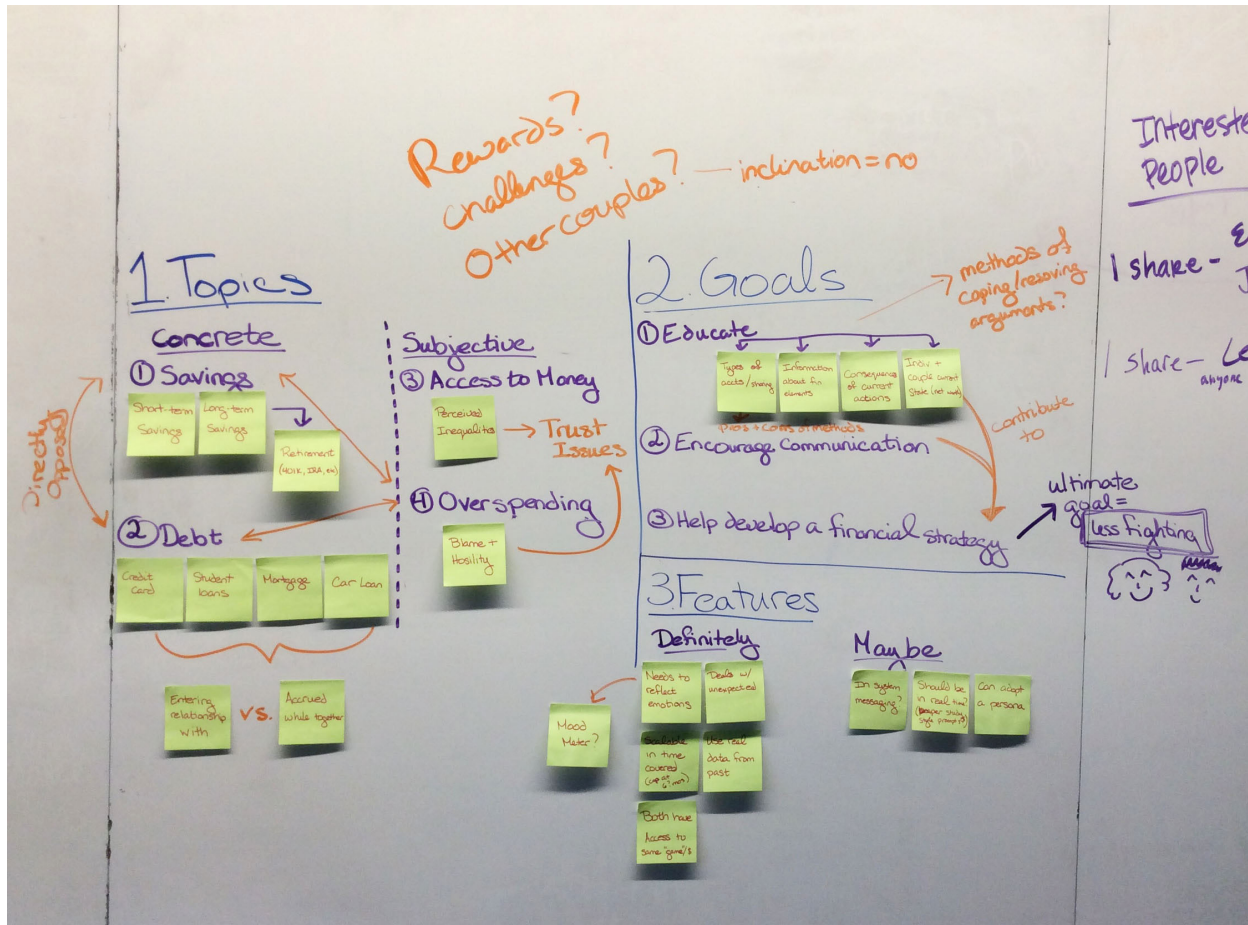
options may be and could discuss which would work best for them

3) decision-making, or a walk through of determining what the couple would actually like to do with planning their finances.

The couple would move through the game linearly and progress as they answered questions or responded to prompts. They would play together with a single game piece. There would then be a money component where they would earn and spend money. There would be a finite amount of money and they would have to prioritize together what they would spend the money on.

The second game I developed would exist in the digital realm and was intended to be played apart. Each partner would respond to questions prompted by the game about their partner, some humorous and some thought-provoking about their joint financial situation. In allowing the couple to play apart, I theorized that this would meet the goal of easing tension because they would have the opportunity to consider their answers carefully without the pressure

of feeling like they needed to answer to their partner right away. The system would then prompt the couple to have a conversation about the questions that came up that day when they were together again.



Exploration of what goal I wanted the game to achieve and what topics it should include

PAPER PROTOTYPING

I wanted to see which techniques, and flow of actions were most effective in prompting discussion. In order to do this, I developed two paper prototypes of two games that pulled elements from all three of these potential directions. In this way, I could test the interaction with real couples.

The first game focused on a linear progression, similar to the game of Life, that would involve moving through a series of case study-based questions, looking at examples of how other couples have handled their finances and dealt with issues to consider if they like or dislike these methods for themselves. The couple would move as a single player through the board, working to reach one of two potential retirement outcomes. As they moved, they would collect money through correct answers. Each retirement outcome would require a minimum amount in order to win.

Intermixed with regular play, there are squares where the couple would be presented with a risk. Together they would choose if they would pursue the risk. If the risk paid off, they would gain more

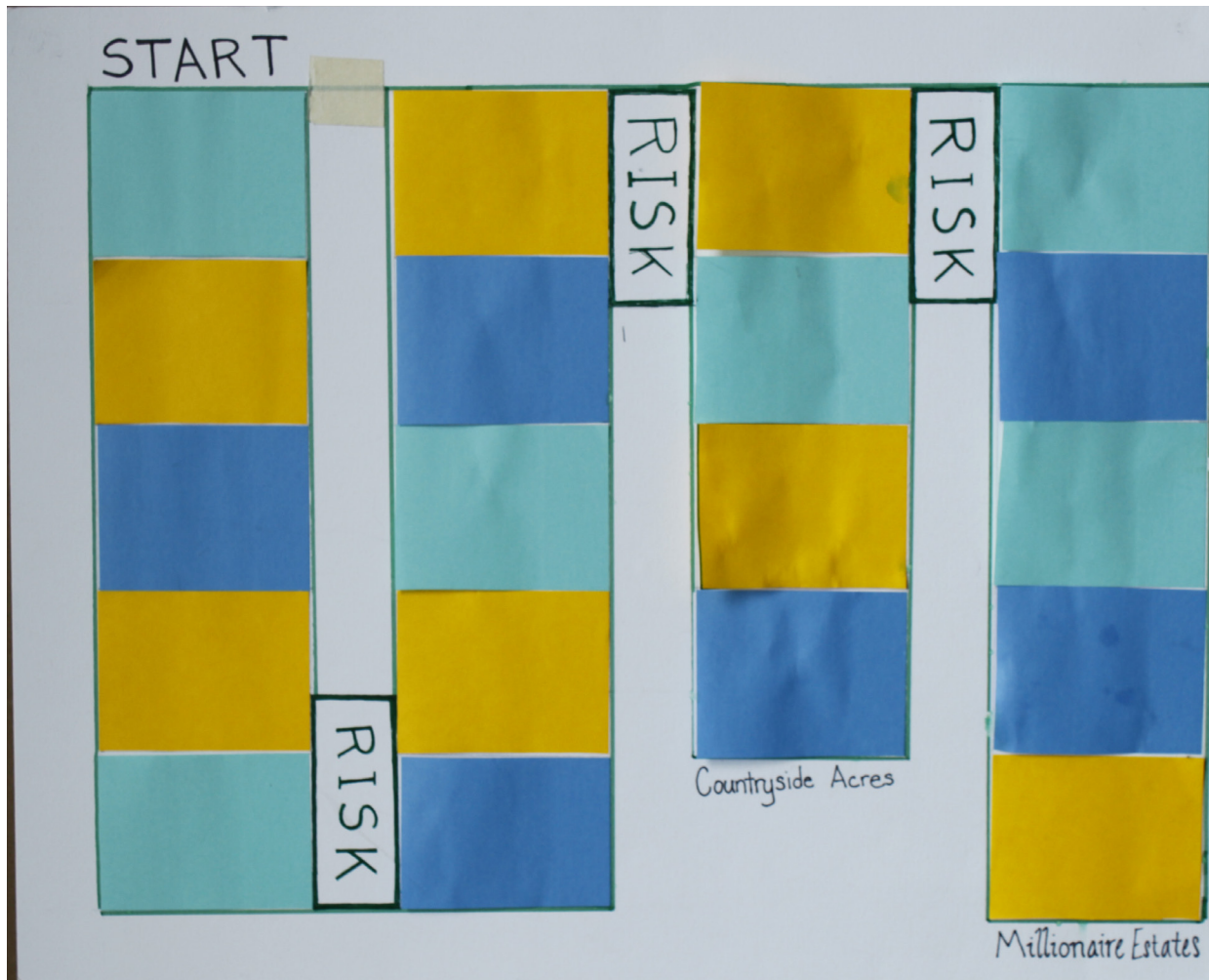
money and increase their chance of reaching the more luxurious of the retirement outcomes.

The second game looked at a non-linear progression to a chosen goal, out of five, that were varying levels of difficulty to achieve. Where one would have to answer questions about financial management methods and one's own habits.

Before testing with couples, I wanted to make sure the game made sense from a basic game design perspective. At this point, I consulted with a game designer and professor at CMU's Entertainment Technology Center for feedback on the game and rules of play. I specifically asked for feedback on appeal, engagement, and replay value.

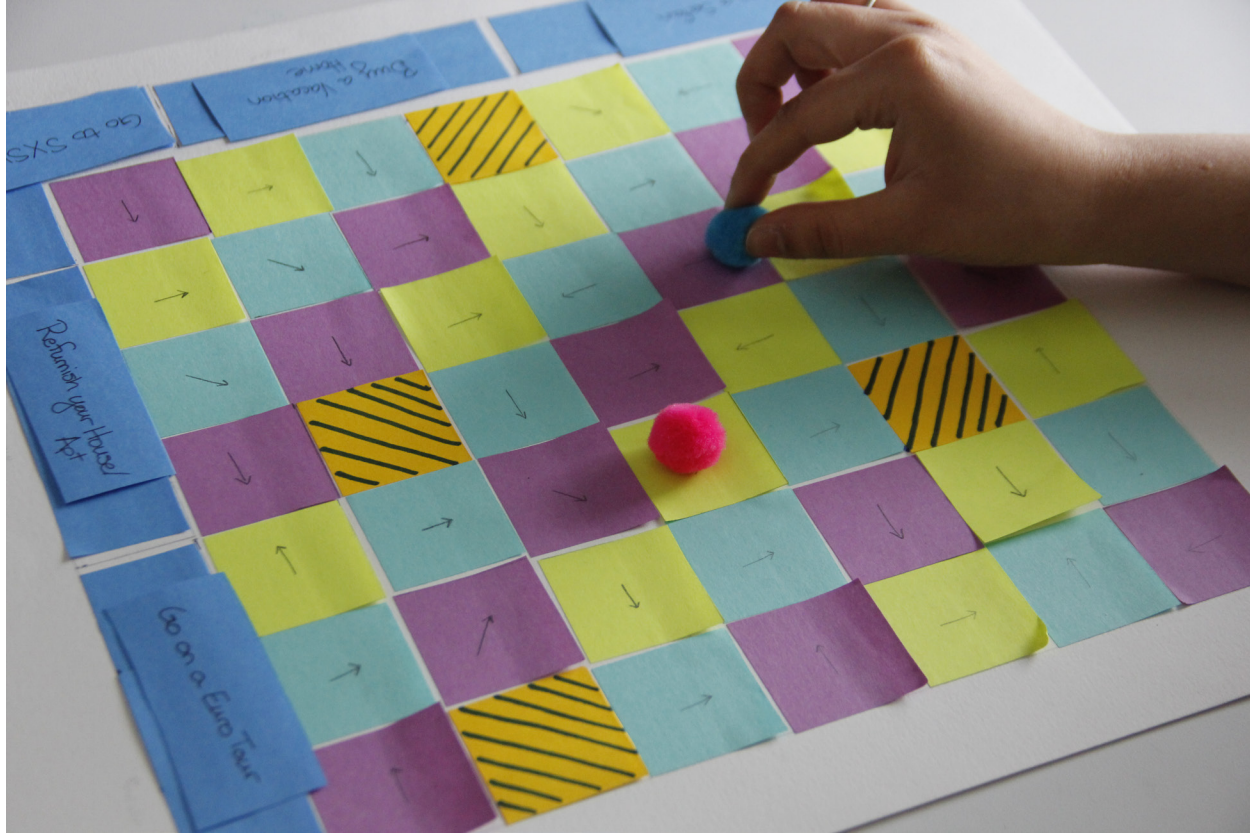
Her primary advice was to make it more fun. "Real life is boring and hard. The game can be a fantasy life."

She suggested having this play out in the goals I was having the couples work toward. Previously, they had been boring and real life (retirement, buying a house, etc). To liven it up, she suggested



Paper prototype of the linear progression game

*Pilot test of the non-linear
game, prior to consulting with
a game designer*



things like going on a cruise or a safari, things that were more daydream-worthy to engage their playful side. She also encouraged me to play up the funny questions more.

Lam was immediately drawn toward the non-linear game as a way to “move through life”. She also strongly suggested that instead of having the couple play as one, they play ‘against’ each other. In this way, each player has agency.

The possibility of having secret motives as drawn from a deck of cards, that may work with or against the person’s partner and would affect how they moved across the board. For example, if squares across the board represented different life milestones such as having kids or buying a car, one partner may have drawn a card requiring them to land on one of those squares before they can reach their goal while the other partner may have to land on another square on the opposite site of the board.

Ultimately, this raised a question for me regarding the tone of the game and the issue of conflict. I wanted the game to prompt conversation, which meant bringing up things

that may be surprising or at least new to one’s partner. However, I didn’t want to pit the partners against each other. This led me to decide that secret goals, that were not necessarily representative of real life desires, put the couple at odds with each other unnecessarily and didn’t incorporate it.

However, her suggestion that there be more decision points throughout the game to help keep players engaged led me to incorporate the risk squares from the linear game and consider what else these alternative squares could do to break up repetitive game play.

TESTING & REFINING GAME CONCEPT

I tested this nonlinear game with three variations of alternative squares:

Risk squares, where a roll of the die would determine if the risk paid off and would move the play forward two squares, or if it didn't and move the player two squares back.

Wormhole squares, where a roll of the die would determine if the player could use it to jump to another wormhole square elsewhere on the board, or lose a turn.

Override squares, would prompt an extra question which if answered correctly would give a player a sort of 'get out of jail free' token that would allow them to move in a chosen direction even after getting a question wrong.

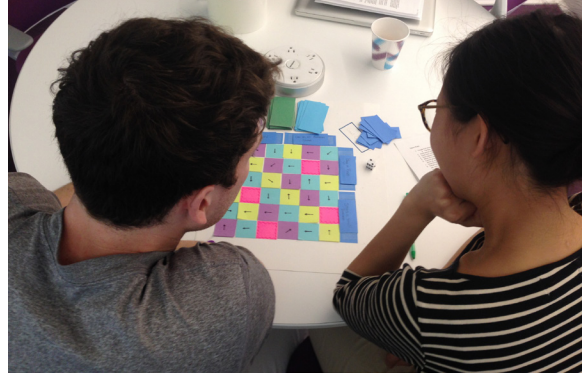
The wormhole was largely ineffective since winning was reliant on both players winning using one would leave one player far behind. Alternately, a player could use it if they fell behind, but no one allowed their partner to fall too far behind without trying to help them.

PARTICIPANTS

<i>*indicates participated in both phases of testing</i>	Gender & Age	Engaged?	Living status	Years Together
	Male, 29 and Female, 28	no	together	1
	Male, 27 and Female, 26	yes	separate	3
	Male, 28 and Female, 27*	yes	together	6
	Male, 27 and Female, 25	no	together	2
	Male, 26 and Female, 24*	no	together	2

The override squares were sought out and won, but never actually used in testing. Most players seemed to forget about them, once earned, for the rest of the game.

The risk squares were the most successful alternative square. The negative consequences were minimal when deciding to pursue these but could help put the partners closer on the board.



DESIGN PROCESS

The final game design evolved over a series of iterations. The initial iterations acted as a form of thinking through making. By jumping straight into creating a game, I was able to explore and imagine how a couple would interact with the game and how the game could help the couple approach new topics and perhaps encourage them to think about things they hadn't before. As a non-game designer, I drew from games I knew and liked myself and writings on gamification to see how game mechanics can be used to achieve results other than play (Reeves and Read, 2009).

Through creating the game, I was better able to understand what I was trying to achieve. Consulting with a game designer helped me to better understand how to create a successful game and keep interest. I continued to iterate as I tested and noticed both what was generating the most conversation. Particularly successful moments for me were when a partner would step back from the game, and want to further explore a topic that had risen through one of the questions asked on a turn.

I tweaked and steered the game to bring out these characteristics more and eliminate elements that weren't working. Sometimes this was removing or rewording questions that confused or put the couple on the defensive more than generated discussion. Other times this was paying attention to the set up and elements of the game play itself. This continuous iteration allowed me to improve the design until I felt it best met my goals.





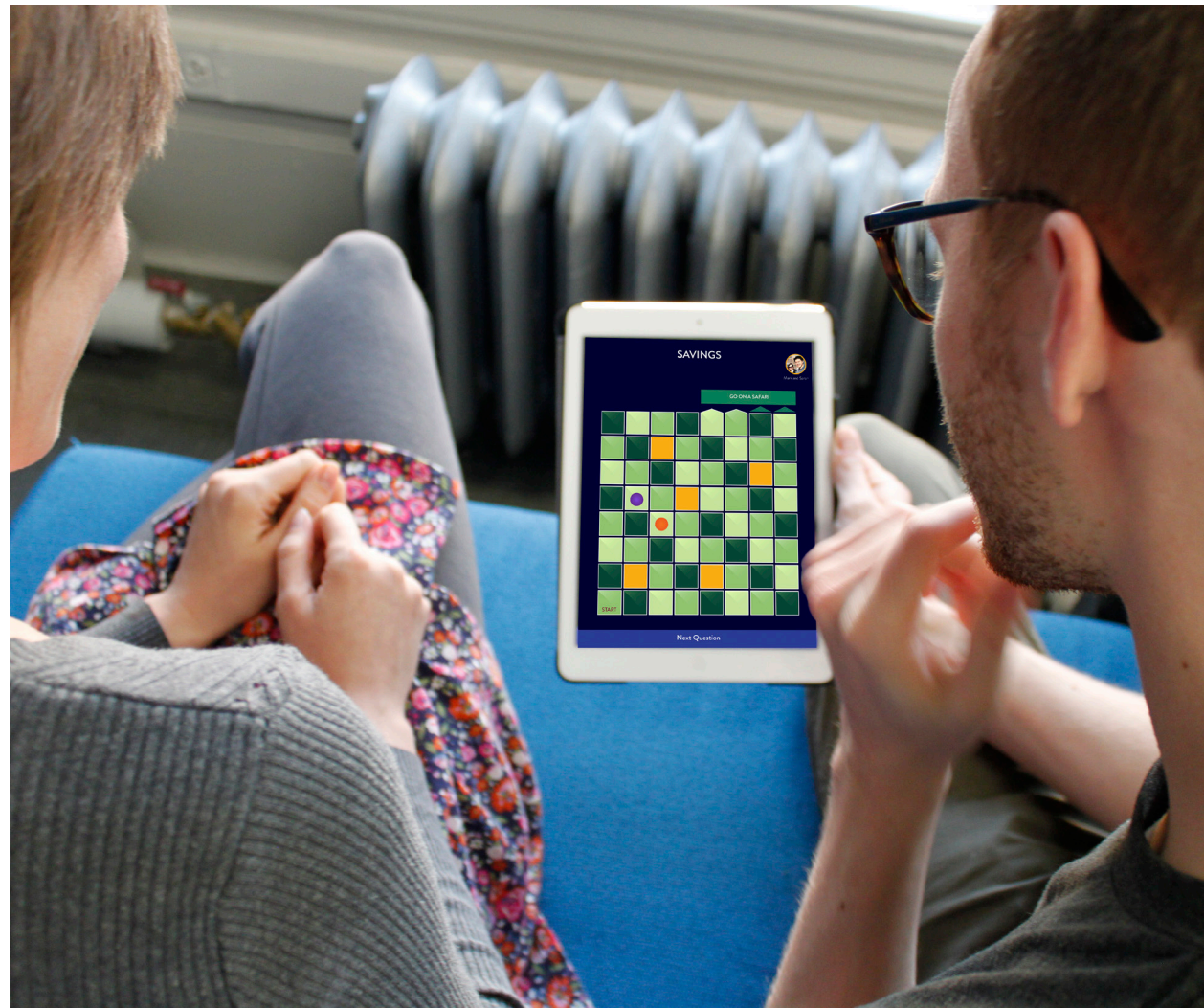
Capable Couples is a game designed to facilitate financial conversations couples should be having as they begin to plan their future. It seeks to reduce anxiety, increase a sense of intimacy and trust, and spark new thoughts and considerations for the couple to discuss in a low pressure environment.

Capable Couples leverages the inherent levity of playing a game to counter the anxiety that comes from discussing money. It guides each partner through a series of questions that they need each other to answer as they work towards a cooperative goal.

The first question that the couple needs to answer when playing is also intentionally not related to finance at all but rather their own relationship. This seeks to remind the couple they are in this together, not against each other.

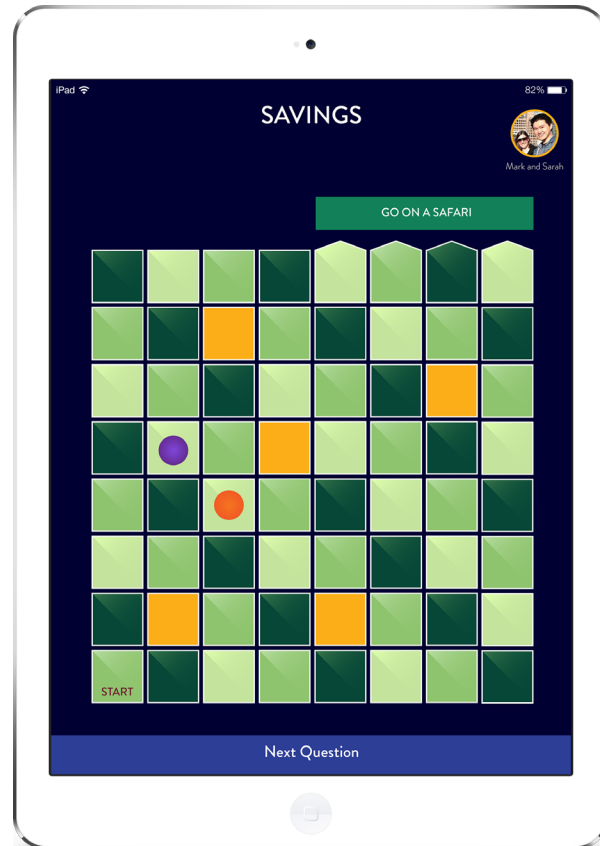
The game then has ebbs and flows of seriousness as later turns alternate between the relationship based questions, factual information questions about finances in areas they've potentially never learned before, and questions about their financial habits and future.

*Playing Capable Couples
on a tablet*



RULES

1. Couple first chooses goal together they want to work toward. The four options are drawn from a deck of cards.
2. Each person each has a game piece they move on the board from square to square.
3. Each color indicates a type of question (educational, informative and fun).
4. When on a square, each player needs to answer a question.
5. Correct answers allow the player to move in any chosen direction. The player can move up, down, sideways or diagonal. Incorrect answers force the player to move in the direction chosen by the game.
6. Certain squares are risk squares. The game determines if the risk pays off. If yes, you can move two squares in your chosen direction. If no, the game will move back two squares away from your goal.
7. In order to win, or achieve the joint goal, the couple needs to reach the goal card together, meaning they need to both get a correct answer on the same round.



The main play screen of Capable Couples.

GAME MECHANICS

I based these rules off of common game mechanics (Schell, 2014). These are the game mechanics I chose to employ and how they work in Capable Couples.

Turns: each partner takes a turn. There is one question per turn before the other partner goes.

Action Points: When it is a partner's turn, they are prompted to answer a corresponding question. If the question is answered correctly, the partner can move up, down or sideways.

Risk/Reward: optional square, which if a partner chooses to pursue, can move up two squares or down two squares. The outcome is determined by a die.

Dice: When a partner is on a risk square, they roll the die to determine and outcome. If the number is odd, the risk paid off and the player moves up two spaces. If the number is even, the risk didn't work in their favor and they have to move two spaces back.

Game mode: While the game must always be played with two players, the couple can choose the topic of their game (savings, mortgages, etc). The location of the chosen goal will also affect how the game is played.

VICTORY CONDITION MECHANICS

Goals: The goals exist on the opposite sides of the board from the starting point. Which of the four goal options is chosen at the start of the game. In order to reach the goal, both partners must answer questions correctly on the same round when both on a square touching the chosen goal.

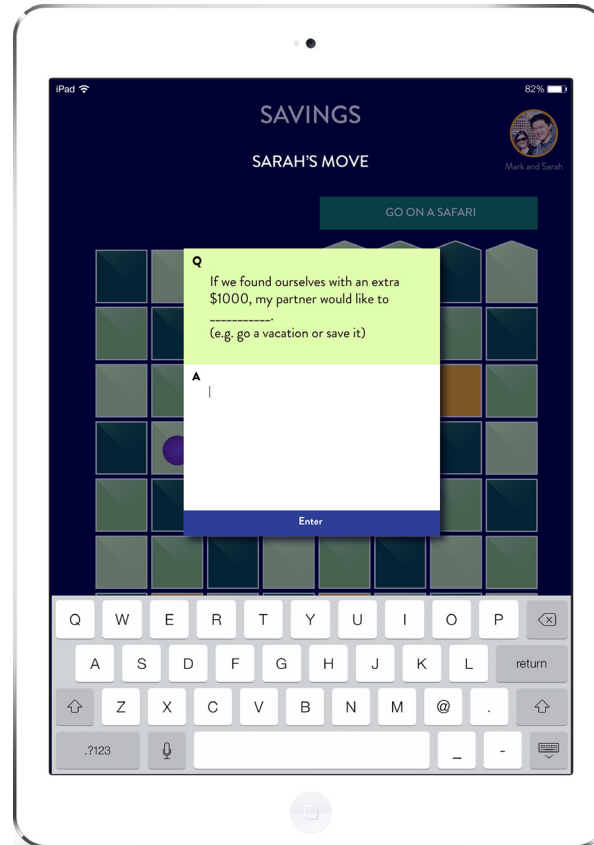
Races: This game is purposefully the opposite of a race. Though playing with separate game pieces, the couple must both reach the goal at the same time in order to win. There is no loser unless they fail to help each other succeed, but ultimately, there is no punishment for answering a question incorrectly because the real aim of the game is not to play and win, but to have the conversations the game brings up.

QUESTIONS

The questions raised throughout the game fall into three categories. The first is Comical. This is the first question type each partner will encounter on the first square. These questions are intentionally goofy and are a fun way of seeing how well you know your partner. For example, “If our relationship was a candy bar, what would it be?” Partner B would determine whether they agree or disagree with what Partner A said. These questions set the tone of the game and encourage the couple to joke around with each other.

The second category of question is Educational. These are straight-forward trivia type questions that each partner either knows or doesn’t know. The game provides the determination of whether the answer is correct or not as well as a more detailed explanation of the topic. This way, the couple is learning together and have a shared resource when discussing matters in the future.

The final category is Inspirational and these questions are really the heart of the game. They focus on financial scenarios or issues a couple



Capable Couples prompting an inspirational question.

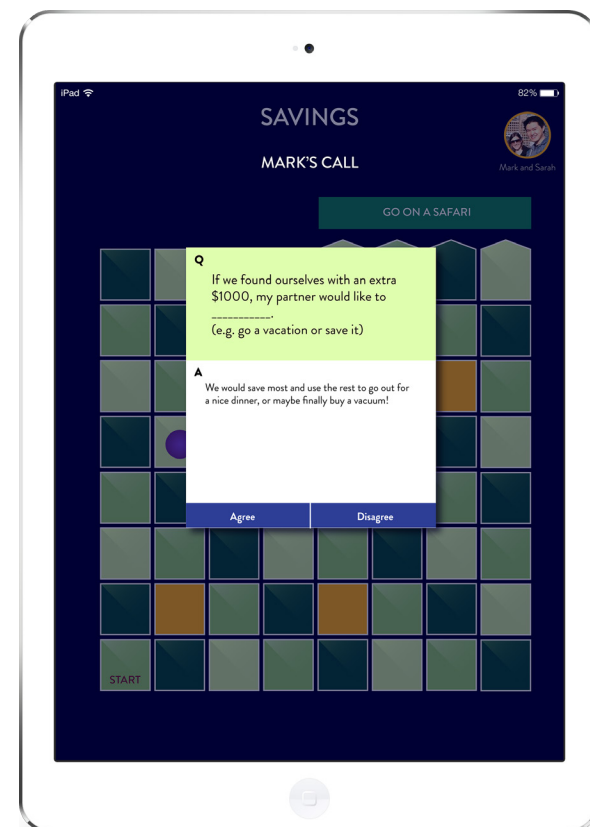
*Capable Couples checking
if a player agrees with his
partner's answer*

may face. For example, “My partner’s biggest spending weakness is ____.” Once again, Partner B determines whether they agree or disagree to see if the player can move forward in the game. These questions seek to surface some of those money personalities and attitudes that are so crucial to working together financially.

Other questions in this category seek to get the couple thinking more concretely about their future in financial terms, such as “We have \$___ in savings right now and try to save \$____ each month.” Even if the couple doesn’t have a current consistent savings plan, this can help them start to talk about what it may be and what each partner thinks is reasonable.

The questions are all interspersed so that no one angle becomes too much. While the Comical questions have a light-hearted tone, they work to bring out a sense of closeness by allowing the couple to laugh and remember what they love about each other. Interlacing these questions with the Inspirational ones help put them in a welcoming mindset, as opposed to tense or defensive. The Educational questions mixed in help keep them in a financial mindset.

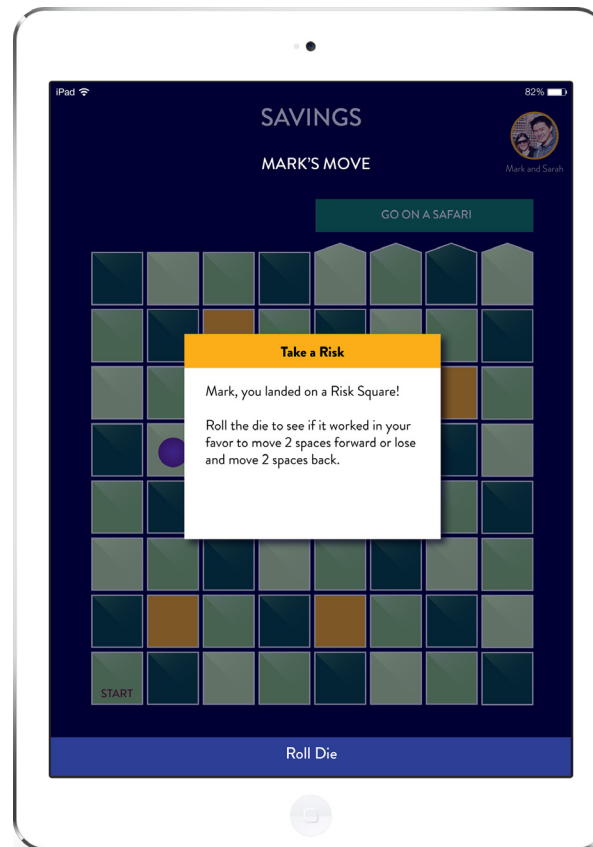
The limited movement of up, down or sideways guarantees they will never have the same category twice in a row as diagonal movement would allow. See Appendix B for the full list of questions.



ELEMENTS OF PLAY

- Co-Location allows the couple to assist each other with the Educational questions and allows them to determine together how serious they want to play. In the first testing session, I was asked if they could help each other answer the educational questions. That had never occurred to me before but I enthusiastically encouraged it. This is a key reason the game is designed for co-located play only.
- The goals are purposefully more fanciful and fun expenses to help put the couple in a creative, future-thinking mindset. There is also the option for the couple to make their own, if they do want to. However, having unrealistic or outrageous goals adds to the sense that playing is not a chore and they are not doing something that requires a serious planning attitude.
- Risk squares provide an opportunity to see whether or not your partner wants to pursue a risk. This may not be indicative of how they may act with real life problems but it offers another chance at starting a conversation. Some money management styles are more

spontaneous and carefree. This is important to bring up as the couple discusses their finances.



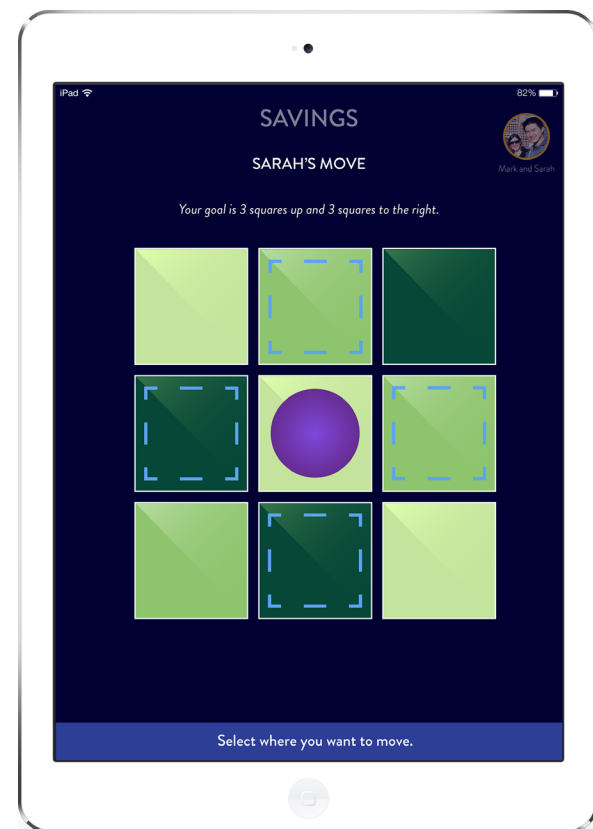
A player lands on a “risk” square in Capable Couples.

Also, on a more practical level, the risk squares add another dynamic to the game to break up the play. Offering multiple decision points throughout a game helps keep a player engaged enough to finish.

A player decides which direction to move in Capable Couples

- Offering versions of the game centered around different financial themes help mediate overwhelming information dump. One concern with this mode of play was that there would just be an information dump that would be hard to sort through and address after playing. This led to the shift toward a series of games that focus on certain topics instead of ranging across financial areas. While the game was conceived for couples on the precipice of committing, (and I still believe this will work best then) it can be used at different points in a relationship in preparation of major life/financial events. However, one of the most successful things about the game was the number of time I received the comment that one or the other partner “hadn’t even thought about x, but it was good.” That, it was interesting to hear what each other thought of things that are far down the road but still should be on their radar.

- Non-linear movement across the game board, and being forced off course, subtly hint at the nature of working toward a goal in real life. This offers a choice to the players at each turn to help keep them engaged.



- Non competitive play is important to the success of this game. Even with anonymous identifiers, entering an element of competing either against each other or against other couples is to be avoided at all costs. The most successful players don't feel bad for getting a question wrong. The game is not timed.
- Something I have considered throughout this project is the context where it might be discovered and used. After testing, I asked each of my couples how they might feel if instead of me asking them to play, it was their bank, or their current financial management tool/service. I received a wide array of responses. Some thought they would trust it more and would like it if the bank rewarded them for playing in some capacity. Others worried the bank might use information revealed in a digital game against them in some way. Still others thought they'd trust it but wouldn't use it if their bank sent it because it would seem gimmicky. In the end, this system would best be served by existing on its own.

DIGITAL FORMAT

The game is designed to exist in the digital format, for ease of dissemination and reduced production costs.

A couple begins a game by selecting a topic (e.g. savings). Four goals are randomly generated and the couple chooses the one they'd most like to pursue. Each goal is assigned a predetermined location on the board. Once a goal is chosen, each partner will be moving their piece toward that goal.

Each partner takes turns. Using the same iPad, the couple goes back and forth answering questions and determining if they agree with each other's answers. When the answer is deemed correct, a zoomed in screen is shown with indicators showing where a player can move.

Risk square outcomes are determined randomly.

The game keeps track of how a couple is doing and allows them to access questions from previous games they may have played. A couple can replay a game with the same theme as many times as they would like.



Capable Couples provides a way to get a conversation started about a difficult topic for couples to discuss. It is important to sustain these conversations though and similar interventions may be needed to

Capable Couples exists at an interesting intersection of finances, a subject often treated with detachment, and the emotions of difficult conversations that people need to have through the course of their lives. There are a number of ways this project could grow in either direction. The root of the problem when discussing money comes from a cultural/social construct where monetary value is tied to personal value while simultaneously forbidding people to talk about money openly. This has caused pervasive problems such as unequal pay (site article about women talking about pay). This project could be

seen as piece in working towards breaking down this cultural taboo of discussing money openly by working to lower the levels of discomfort.

This also deals directly with interpersonal relationships and how two people communicate. This idea of mediating and facilitating the conversation through humor and reminders of a shared interest could be applied to a number of other areas such as parent/child sex conversations, or end of life plans with an adult child and parent.



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FAKE FINANCIAL INFORMATION

In the exploration stage of my research, I provided couples with fake financial information that would inform how they would make three big purchases I presented to them. They would choose an apartment first. Then the financial information was adjusted to reflect the apartment they chose. They then had to choose

a car for them both to use. Finally, they had to choose a set of living room furniture for their apartment. These are the cards I provided to the couples with the finances.

Apartment Hunting	
Combined Monthly Income:	\$6500
Combined Checking Amt:	\$1600
Combined Savings:	\$2000
Bills and Necessary Expenses:	\$1350
Average Other Expenses:	\$1200
Combined Debt:	\$110,000
Credit Card Limit:	\$3500
Current Goals: Want to go to a friend's wedding in California next month.	
Est cost:	\$2650

Car Shopping		SSA
Combined Monthly Income:	\$6500	
Combined Checking Amt:	\$4300	
Combined Savings:	\$2000	
Bills and Necessary Expenses:	\$2610	
Average Other Expenses:	\$1200	
Combined Debt:	\$110,000	
Credit Card Limit:	\$3500	
Current Goals: Want to go to a friend's wedding in California next month.		
Est cost:	\$2650	

Car Shopping		LL
Combined Monthly Income:	\$6500	
Combined Checking Amt:	\$4300	
Combined Savings:	\$2000	
Bills and Necessary Expenses:	\$3350	
Average Other Expenses:	\$1200	
Combined Debt:	\$110,000	
Credit Card Limit:	\$3500	
Current Goals: Want to go to a friend's wedding in California next month.		
Est cost:	\$2650	

Car Shopping		PBA
Combined Monthly Income:	\$6500	
Combined Checking Amt:	\$4300	
Combined Savings:	\$2000	
Bills and Necessary Expenses:	\$2900	
Average Other Expenses:	\$1200	
Combined Debt:	\$110,000	
Credit Card Limit:	\$3500	
Current Goals: Want to go to a friend's wedding in California next month.		
Est cost:	\$2650	

Car Shopping		SA
Combined Monthly Income:	\$6500	
Combined Checking Amt:	\$4300	
Combined Savings:	\$2000	
Bills and Necessary Expenses:	\$3070	
Average Other Expenses:	\$1200	
Combined Debt:	\$110,000	
Credit Card Limit:	\$3500	
Current Goals: Want to go to a friend's wedding in California next month.		
Est cost:	\$2650	

Furniture Replacement	
Combined Checking Amt:	\$1000
Combined Savings:	\$800
Combined Debt:	\$110,000
Credit Card Limit:	\$3500






LARGE PURCHASE INFO CARDS

I sought to keep the variables to as much of a minimum as possible when presenting the couples with options for their purchases. For each purchase, they were presented with four different options at different price points, but

also with different aesthetics and appeal. The apartment cards are similar to MLS listings. Aside from the brand new cars and furniture, all photos and information was pulled from real Craigslist postings.

This page and opposite: the double-sided apartment listings presented to couples during the play purchasing activity.

Southside Slopes Apartment



Southside Slopes Apartment

2 Bedrooms, 1 Bath | 1,540 sq ft
\$1100/mo

Utilities: \$160/mo

Off street parking

Hardwood floor, crown moldings and fireplace.

Dishwasher, stove and refrigerator all stainless steel

Master bedroom is 14' by 12' and second bedroom is 12' by 8'

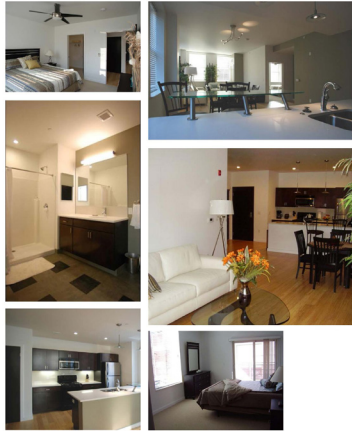
Basement laundry room

Central Air

Walk Score 81/100
Transit Score 49/100

30 minutes from Partner A's work
40 minutes from Partner B's work
30 minutes from most friends

Lawrenceville Loft



Lawrenceville Loft

2 Bedrooms, 2 Bath | 1,300 sq ft
\$1800/mo

Utilities: \$200/mo

Brand new rehab of an existing 4 story brick structure

Dishwasher, stove and refrigerator all stainless steel

In-unit washer/dryer

Balcony

Controlled Access to building

Elevator

Central Air

Walk Score: 79/100
Transit Score: 35/100

30 minutes from Partner A's work
25 minutes from Partner B's work
10 minutes from most friends

Point Breeze Apartment



Point Breeze Apartment

2 Bedrooms + Den, 1 Bath | 1,700 sq ft
\$1300/mo

Utilities: \$250/mo

First floor of a 4-plex

Decorative fireplace and French doors

Eat-in dining room and full kitchen

No dishwasher

Sunroom at the front of the house

Small third bedroom/den

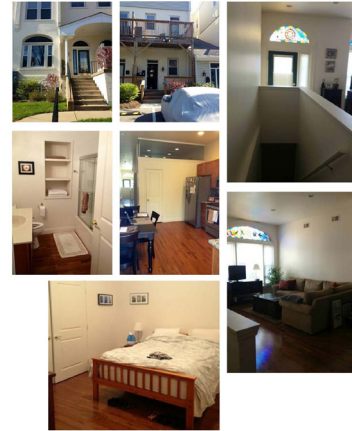
On-street permit parking

Washer/Dryer hookups in basement (machines not included)

Walk Score: 75/100
Transit Score: 35/100

45 minutes from Partner A's work
15 minutes from Partner B's work
25 minutes from most friends

Shadyside Apartment



Shadyside Apartment

1 Bedroom, 1 Bath | 1,100 sq ft
\$1600/mo

Utilities: \$120/mo

Hardwood floors

Recessed lighting

Stainless steel appliances

Full unfinished basement for storage

Private laundry

Front and back porch

One parking space

Walk Score: 72/100
Transit Score: 64/100

20 minutes from Partner A's work
15 minutes from Partner B's work
10 minutes from most friends

This page and opposite: car listings presented to couples during the play purchasing activity.

2015 Toyota Highlander



\$30,000
(with \$5000 down, \$400/mo, 72 mo)

Insurance: \$200/mo

Brand New, comes with warranty

20/25 est. MPG

FWD

Seating for eight

Bluetooth enabled

Backup Camera

Three-zone automatic climate control

Top Rated Midsize SUV

2015 Toyota Corolla



\$19,000
(with \$5000 down, \$230/mo, 72 mo)

Insurance: \$120/mo

Brand New

28/37 est. MPG

1.8L engine

Air conditioning with dust and pollen filter

USB port and Bluetooth capability

Ultra Low Emission Vehicle II

FWD

Moonroof

2006 Toyota Corolla



\$10,000
(with \$2000 down, \$130/mo, 72 mo)

Insurance: \$85/mo	Gray Exterior, Tan Interior
Certified Pre-owned	EPA Mileage: 30/38 MPG
80K Miles	1.8L engine
2WD	4 cylinders
Automatic Transmission	



2002 Honda Civic EX



\$4,000 (pay in full)

Insurance: \$60/mo	Silver Exterior, Grey Interior
For sale by owner	Mileage: 32/37 MPG
139K Miles	1.7L engine
FWD	4 cylinders
Automatic Transmission	

This page and opposite: the furniture listings presented to couples during the play purchasing activity. NOTE: the amount of furniture varied as well as price.

Quality Furniture Store Purchase



\$2500

Only includes couch

Brand New

Can choose from a variety of colors and fabrics (such as microfiber, suede, basketweave, tweed and linen)

Free Home Delivery

1-year Manufacturer Guarantee

Craiglist Purchase



\$500

includes couch and chair

3 years old

Pet-free & smoke-free home

Must pick up and move yourself

IKEA Purchase



\$850

includes couch and chair

Brand New

Can choose from a variety of colors

Will Deliver for extra \$60, or can move yourself

Hand-me-downs



FREE

Includes couch, loveseat and chair

8 years old

Pet-free & smoke-free home

Owner will help you move



FULL LIST OF QUESTIONS IN GAME

COMICAL

My partner's favorite bird is_____?

What was the last secret you told your partner?

Whenever I want to _____ my partner wants to _____!

Who is your partner's top celebrity crush?

What comic character does your partner most resemble? (charlie brown, daffy duck or tasmanian devil)

How does your partner like his/her eggs?

My partner is a natural born _____.

Which will your partner say (s)he is ruled by:
•heart •mind (or) •stomach

If our relationship was a candy bar, it would be a

A meteor is headed for your house. All family members, pets, and pictures have been saved. There is time to save one more item. What will your partner grab on his/her way out?

If your partner could trade lives with a celebrity, who would it be?

INSPIRATIONAL

My partner's dream house/apartment would have ___ bedrooms and ____ bathrooms and we'd buy it in ___ years.

We have _____ in savings. We put (about) _____ in each month.

My partner spent _____ eating out last month.

My partner imagines retirement in _____.

What is your biggest spending weakness? (i.e. what can you not resist buying/doing)

This is a freebie! Tell your partner and you get to move forward in your chosen direction!

If you suddenly found yourselves making an egregious amount of money, would your partner want to live lavishly or live moderately and enjoy an early, comfortable retirement? Or some other alternative?

What is your current biggest short-term financial goal as a couple?

What is your definition of a happy married life?

_____ is a reasonable amount to spend on a vacation.

If you each had a financial “role”, who would pay the bills, who would keep track of the income and out-go, and who would make investment decisions?

My partner’s credit score is around _____.

EDUCATIONAL

A Roth IRA is _____?

- a. not necessary if I have a 401(k)
- b. a retirement savings account
- c. tax deductible (contributions)
- d. b & c

True or False:

You can consolidate your student loans with your spouse.

Which is the lie?

- Real estate is a safe investment
- Draft protection still costs you fees
- Having a low credit utilization ratio can be better than having a high one, or none at all.

It is common advice that your rent should be no more than ___% of your total income.

True or False:

Buying a new car is an investment.

True or False:

Late fees on bills/student loan repayments can affect your credit score.

You should be saving between _____ of your income for retirement through a 401(k) and other means.

- a. 8 - 14%
- b. 20-25%
- c. 2-3%
- d. 1-10%

True or False:

Financial professionals must always give advice that's in my best interest.

True or False:

Your annual credit report from different credit bureaus (Experian, Equifax, and TransUnion) can contain different information

True or False:

You can annotate the report that's sent to lenders.

True or False:

Your annual credit report will contain your FICO credit score among other information

True or False:

Closing old accounts and opening new ones negatively affects your credit score.

True or False:

Old records of late or missed payments can be removed from your credit history







