



CHEEDAR BOWL EXECUTIVE SUMMARY V.2

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Overview

The Cheddar Bowl is a financial literacy “stew” aimed at students. The term “stew” refers to the Cheddar Bowl’s unique ability to blend the concept of game, simulation, and lesson into an enriching experience that expands a student’s understanding of personal finance. Designing the system to maintain this difficult balance will be instrumental in the the success of this prototype.

Each user assumes a profile - each profile is comprised of a set of attributes: occupation, marital status, car ownership, debt, financial state, and living arrangements. The user is given regular opportunities to make realistic financial decisions that will either directly or indirectly affect their financial situation and personal status.

There are random global events and random local events that affect users. Some of these will be results of users actions. Others will be unavoidable and the product of chance. Attributes will be affected accordingly. The local events will manifest through Non Player Controlled profiles (NPCs) (computer generated “personalities”).

User’s will respond and react to, advise and otherwise interact with these persons. Their purpose is varied. It is to evoke feeling from and attach emotion to associated financial events and decisions. Their existence serves as the prototype’s variability. Maintaining the balance between randomness (a family member is hospitalized) and predictability (a stock pays dividends) is as important as it is challenging. NPCs will be used as an medium for user assessment.

The user will continue this process over the course of a simulated seven-year economic cycle.

The game was originally controlled and moderated by a human game master. In the game master’s place there will be automated logic that controls the repercussions and rewards attributed a given user.

**In order to mimic reality, the “stew” will continue to “cook” whether or not the user is logged in - ignore bills or skip reading the newspaper and the world, in the form of an NPC, will reach out. User’s will be alerted to activity occurring in the World of Cheddar.

Project

The Cheddar Bowl project includes the following deliverables:

- Visual front-end design ~ *for end-users*
- Database reconstruction ~ *based on George Fu's current database and logic work*
- Custom Content Management System (CMS) ~ *for game administrators*

Our Thoughts

In our attached wire-frame please find a draft of a user's weekly Cheddar financials. In this early depiction, opportunities are displayed in a news-like feed. A user is given a synopsis of an opportunity, a handful of actions, the consequences or rewards of those actions, and any additional information that might help a user make the best decision. A user's actions would increase or decrease experience, affect other opportunities, alter overall happiness, and / or stress and leisure.

We see this design accomplishing three goals:

1. The user is given all the information he might need to play out a scenario for good or for ill.
2. The user sees the consequences and irreversibility of his/her actions in real time.
3. The "feed" offers quick interaction with random or expected NPCs and updates.

Development

Functionality - The prototype will also include the items listed below:

1. A variety of starter user profiles and their respective attributes.
2. A variety of NPCs and their respective attributes.
3. The "Dashboard" will be accessible by the user (mint.com's dashboard serves as inspiration. See attached). From this users will be able to see their status. They will be see notifications - calls to action. They will be able to see past decisions that they've made. (More details about the user's "Dashboard" will be discussed through further research and requirements analysis). **User's will be able to access the positive and negative results of "past actions".
4. Users will be able to make financial decisions and experience proportionate consequences of those decisions. For this initial build, effects will most likely be displayed numerically / textually as opposed to graphically.
5. The user should be able to complete the entire 7 year economic cycle in an appropriately scaled down period of time.

Summary

**All items are subject to incomplete delivery on Oct. 1. This means that we will consciously make room for iteration and modification into these portions of the prototype.*

***The initial deliverable will be a working prototype. All items marked with two asterisks are not included in the Oct. 1 deadline and not part of this proposal.*

****The prototype will be built to sell. We realize the goal this Fall is to garner financial support for further developments of the system. The prototype will be optimized for such interaction.*

Technologies

Database- MongoDB

- Non-relational database
- Document based system

- Less hassle and easier on the developer
- Young system but high potential

Backend- Ruby on Rails

- User authentication and security
- Database communication and storage
- Implementation of game mechanics and logic
- Calculations of user actions
- Ability to change game based values (example: leisure rating of a job)

Frontend- JavaScript & AJAX

- User interaction
- Implementation of notification systems
- Implementation of basic animations & interactive effects
- Integration of backend data with application structure/design

Technical Production- HTML & CSS

- Application structure & styling
- Integrates graphics & content
- Delivers application content to user's browser

Schedule

Start Date - Immediate

End Date - October 1 (without CMS)

End Date - November 15 (with CMS)

Cost

- Graphic Design: 60 hours
- Wireframing & Front-end Design (Rails Views): 50 hours
- Database Design & Creation (Rails Models): 70 hours
- Back-end Integration (Rails Controllers): 50 hours
- Front-end Interaction (JavaScript): 50 hours
- Custom Content Management System: 120 hours

Total Time: 400 hours

Hourly: \$75

Total Cost: \$30,000

Total Cost (without CMS): \$21,000

****The cost has been adjusted to reflect our improved understanding of the deliverables as they have been elucidated by follow-on conversations and documentation.*

[Dashboard](#) [Occupation](#) [Finance](#) [Entertainment](#) [Learning](#)

July 9, 2011

Pay Credit Card Bill

Pay amount

[enter](#)

[max payment](#)

+10 xp Paying the minimum will allow you to hold on to more cash

-10 xp Your credit card interest is currently 19% of any outstanding balance.

[learn more](#)

Open a Roth IRA

Deposit amount

[enter](#)

[max deposit](#)

+110 xp You can invest up to \$5000 / year. Monthly maximum = \$416.66

-n xp This will diminish your checking account. You will lose 1 xp per \$100

A Roth IRA is a special type of retirement plan under US law that is... Direct contributions to a Roth IRA may be withdrawn tax free at any time.^[1] Rollover, converted (before age 59½) contributions held in a Roth IRA may be withdrawn tax and penalty free after the "seasoning" period (currently 5 years). Earnings may be withdrawn tax and penalty free after the seasoning period if the condition of age 59½ (or other

[collapse](#)



Birthday Money

[save](#)

[buy](#)

+\$500

+10 xp Put money in your Savings account.

-25 xp Spend money on a new television (Increases happiness)

[learn more](#)

July 8, 2011

more





TELL A FRIEND!

Get Help

Your Profile : apatzer@mint.com

Logout

Overview

Transactions

Trends

Investments

Ways to Save

Accounts

YOUR ACCOUNTS

Update

Edit

Assets \$106,206

 ING
ING Checking \$16,234

 ING
Orange Savings \$11,753

 Fifth Third
Primary Checkingx7387 \$9,205

 Fidelity
Rollover IRA \$31,300

 E*trade
Investment \$15,013

 E*trade
Investment \$13,296

 Fidelity
Individual - TOD \$9,405

 Vanguard
Roth IRA \$0.00

 Fidelity
Individual \$0.00
Debt (\$1,805)
Credit Available \$12,809 / \$14,700
 American Express
Blue Cash \$851

 American Express
Jetblue Card \$534

 Chase Manhattan Bank
Credit Card \$351

 Capitalone
Visa Platinum \$69

YOUR ALERTS

Change your alerts

Setup mobile delivery

! Your bill for Capitalone - Visa Platinum is due in 4 days.

APR 25

! In the past 30 days, you spent \$476 on Food & Dining. Usually you spend \$258.

APR 23

! ING - ING Checking charged you ATM Fee of \$1.50.

APR 19

PORTFOLIO MOVERS & SHAKERS

Symbol	Value	Change *
▲ Fidelity Select Comm Equipment Port FSDCX	\$9,618	+\$176 +1.86%
▲ Silicon Laboratories Inc SLAB	\$515	+\$7.35 +1.45%
▲ Vanguard Small Cap Value Index VISVX	\$5,000	+\$40 +0.8%
▲ S&P 500 Index	†	+0.7%
▼ Fidelity New Markets Income FNMX	\$6,010	(\$33) -0.55%
▼ Royce Low-Priced Stock Service RYLPX	\$5,796	(\$68) -1.15%
▼ Ishares Inc Msci Cda Index EWC	\$6,530	(\$152) -2.27%

* Change is between the closing prices on April 21, 2008 and the most recent date the markets were open.

† The S&P 500 is included to show you how your holdings compare to the market average.

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YOUR BUDGET

0 APRIL 2008 100% BUDGET OVER?



Mint has created a few budgets based on your average spending. Edit or add more budgets as you please.