Project Proposal:
The Paramount Investments League

Software Engineering
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Team 1:

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Christopher Mancuso
David Karivalis
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Hyperlinks:

Webapp Link
Project Repository
Reports Repository

Revision History:

Version No.	Date of Revision
v.1	1/26/2014

Contents

1 Team Profile

Team 1 will be working on Project 5: Stock Market Investment Fantasy League and they have named their project "The Paramount Investments League". This project is intended to serve as an exercise in software engineering focusing on building experience in the design, architecture, construction, test, and maintenance of a small-to-mid sized complex software application.

At this time a project lead has not been elected, but David Patrzeba will be acting as technical lead. All members will have input on the decisions of the team and communication is being facilitated by a project mailing list, git repositories, a wiki, and google+ hangouts.

1.1 David Patrzeba

David is proficient with the Java, C, and C++ languages, RESTful APIs, SQL, and is highly familiar with iterative software design and object oriented design patterns. David also has experience with Android development, relational database schema, and user experience. David will be acting as a technical lead on the project.

1.2 Eric Jacob

Eric is proficient with the Java, C and C++ languages, SQL, and Python. Eric also has experience with Bash scripting, JDBC, and the JavaMail API. Eric also has some familiarity with Java Servlet API and Java Persistence API.

1.3 Evan Arbeitman

Evan is proficient with the C++ language. Evan is also familiar with some PHP, Python, Bash Shell Scripting and Python languages.

1.4 Jesse Ziegler

Jesse is proficient in C and C++. Jesse is familiar with the concepts of object oriented programming and some experience in HTML/Javascript. He is also familiar with concepts of stock exchange investing and virtual trading systems.

1.5 David Karivalis

David is proficient with the PHP, Java language. David is familiar with C, JavaScript, and HTML/CSS. David has experience in iOS and Android development, user experience, and photoshop. David will be the UI lead.

1.6 Christopher Mancuso

Chris is proficient in the C++ language with familiarity in HTML/CSS, PHP, Bash, and JavaScript. He also has knowledge on remote servers, vmware, vsphere, wamp, and other networking applications.

2 Project Proposal

Team 1 has elected to work on Project 5: Stock Market Investment Fantasy League with the goal of implementing a web application to service a core audience of novice investors in introducing them to the ins and outs of tradeable assets. Novice investors come from all ages and backgrounds but tend to fall into the 16-30 year old crowd. By "game-ifying" the action of trading stocks; by allowing users to collect achievments and be rewarded in interesting ways; we plan to maintain their interest in the game and grow the user base while simultaneously teaching them basic investment strategies.

2.1 Resgistration

The end user should be able to register and login to the system in a simple and straight forward manner requesting the least amount of information necessary in order to start using the system.

2.2 Social Media Integration

End users should be able to push messages to their social media personality that indicate recent trades that they have made or achievments that they have earned.

2.3 Transactions Ticker

All site vistors should see a ticker of the most recent trades scroll across the bottom of their screen at a speed such that they can read and process the information easily much like seen on CNBC.

2.4 Unified Interfaces

The end should experience a unified experience across mobile, tablet, and desktop browsers. The customer should be able to use the major modern browsers Firefox, Chrome, Safari, and Internet Explorer.

2.5 Portfolio Management

The end user should be able to place orders to buy, sell, short, stop, and limit, on any tradeable asset available on the NYSE and the NASDAQ. The user should be able to cancel any pending orders that have not gone through (eg, a limit order that hasn't triggered).

2.6 Graphs and News

End users should be presented with a news feed related to his/her portfolio. Additionally they should be able to manipulate graphs in order to compare performance of a variety of tradeable assets.

2.7 Email Updates

The end user should be able to receive email updates at a frequency and granularity that they choose.

2.8 Educational Interfaces

End users should be able to mouse over investment terms (eg, P/E ratio) and see a pop up dialog with a brief description and links to internal and external resources.

2.9 Leagues

End users should be able to create, modify, and participate in leagues that agree to a customizable set of rules to determine a winner (eg, the first to double their money). Leagues should be able to be set up by any end user and be made public or private.

2.10 Achievments

End users should receive recognition of achievments accomplished (eg, earn 10% in a month) and be rewarded with additional play money, stocks, and other novel rewards.

3 Product Ownership

The project has identified 10 core pieces of functionality which will be implemented by a team of two with the first name listed set as the go to man for that given piece of functionality. Every team member will be assigned a minimum of 3 pieces of functionality to be responsible for and will be lead on no more than two pieces of functionality.

3.1 Registration Functionality

Evan Arbeitman and Christopher Mancuso

3.2 Social Media Integration Functionality

Jesse Ziegler and Eric Jacob

3.3 Transaction Ticker Functionality

David Karivalis and Evan Arbeitman

3.4 Unified Interface Functionality

David Karivalis and Eric Jacob

3.5 Portfolio Managment Functionality

David Patrzeba and David Karivalis

3.6 Graphs and News Functionality

Christopher Mancuso and Jesse Zeigler

3.7 Email Update Functionality

Evan Arbeitman and Jesse Zeigler

3.8 Educational Interface Functionality

Eric Jacob and Christopher Mancuso

3.9 League Functionality

Jesse Zeigler and David Patrzeba

3.10 Acheivments Function

David Patrzeba and David Karivalis