CECS BS Challenge

Vision

Version 1.0

ReVision document History

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| **Date** | **Version** | **Description** | **Author** |
| 24/09/17 | 1.0 | first draft of the Vision document | Ruben, Kenny, Khai |
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Vision

# Introduction

For this course, CECS 343, we will practice on software development by creating a program from scratch based on the requirements provided. This software will be a card game based on Professor Hoffman’s Harry Potter game. In this game we will travel within the campus and choose a card in each room to accomplish its requirements.

## 1.1 Purpose

This program will be the tutorial for us to pace ourselves into the software developing world. Despite simplicity, this software has all the fundamental aspects needed to develop a basic graphic program.

## 1.2 Scope

This project will associate Object Oriented Programming and Data Structures. It will also improve our skills in software engineering and graphic design..

## 1.3 Definitions, Acronyms and Abbreviations

API - Application Programming Interface

OOP - Object Oriented Program

## 1.4 References

Eclipse API, MS Paint, Adobe Photoshop,, Java API,

## 1.5 Overview

This vision document will discuss about all stakeholders that are part of this project, their goals, possible problems and solutions to them in this project, and the game’s features. This document will be organized categorically and chronically. The developing path will be updated consistently throughout the project.

# Positioning

## 2.1 Business Opportunity

Completing the project will lead us closer to obtaining a degree and a job.

## 2.2 Problem Statement

|  |  |
| --- | --- |
| The problem of | Requiring a virtual board game to be made |
| affects | Student collaborators |
| the impact of which is | An opportunity to create an interactive game from scratch |
| a successful solution would be | An entertaining game and full credit for the project |

## 2.3 Product Position Statement

|  |  |
| --- | --- |
| For | Gamers, programming students and Professor Hoffman |
| Who | CECS 343 |
| The (product name) | CECS BS Challenge |
| That | to improve our software development skills and experience |
| Unlike | Other boring computer science projects |
| Our product | will provide entertainment while developing and exploring the software. This project will provide the insight of software development to newcomers of computer science |

# Stakeholder and User Descriptions

Stakeholders: Student collaborators whose grade depends on successful implementation of the virtual board game.

Users:

- Professor Hoffman, who will play and grade the game.

- Any students who play the game.

## 3.1 Market Demographics

We are viewed in the market as programmers with moderate experience in Object Oriented Programming, and with this project we hope to develop our reputation as professional Software Developers. Doing this project will helps us become more experienced in software development. It will create a fun and interactive game.

## 3.2 Stakeholder Summary

|  |  |  |
| --- | --- | --- |
| **Name** | **Represents** | **Role** |
| Student Collaborators | Students represent themselves on the project | Students ensure even collaboration to produce a quality virtual board game |

## 3.3 User Summary

|  |  |  |
| --- | --- | --- |
| **Name** | **Description** | **Stakeholder** |
| Player | Programming students, professor, gamers | The collaborating students will create the game, which will be played by both students and the Professor. |

## 3.4 User Environment

There are three people that take part in completing this project. This game will be developed on campus in a computer lab and at home, and will be played solely on PC. Completing each task will take at least 30 minutes on average. The Microsoft Windows is being used in this project. Other applications that might be used in this project are possibly mobile devices.

## 3.5 Stakeholder Profiles

### Student Collaborators

|  |  |
| --- | --- |
| **Representative** | Ruben, Kenny, Kai |
| **Description** | Computer Science students enrolled in “Intro to Software Engineering” |
| **Type** | University Student |
| **Responsibilities** | Implement the software to create an interactive, functional board game |
| **Success Criteria** | Project is successful if the game produced is functional and satisfies all the requirements.  Full credit on the assignment. |
| **Involvement** | Collaborator |
| **Deliverables** | Interactive board game |
| **Comments / Issues** | One issue is coming up with a schedule convenient for all programmers in this project. |

## 3.6 User Profiles

Player - The user of the product will be a single player in the interactive board game.

### User: Player

|  |  |
| --- | --- |
| **Representative** | The user is the single player in the game. |
| **Description** | University students and the Professor |
| **Type** | Casual player can be anybody with any possible background  Guru might be programmer, computer science student, professor |
| **Responsibilities** | The user may playtest the game. |
| **Success Criteria** | The program is considered a success if the program offers enough entertainment and usefulness to the user. The program needs to be fully optimized to be considered complete. The user will receive needed information and use the program with maximum efficiency. |
| **Involvement** | User: Professor Hoffman: supplies gameplay requirements |
| **Deliverables** | none |
| **Comments / Issues** | Difficulties in communication among dev team |

## 3.7 Key Stakeholder / User Needs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Need** | **Priority** | **Concerns** | **Current Solution** | **Proposed Solutions** | |
| Good Schedule | 1 | Poor use of time to do the project. Each member of the project can be preoccupied with other class work. | Work during lab time in class. | | Discuss all available times that each programmer has and create a schedule based on that. |
| Good Pacing | 2 | Difficulties to keep track with the development of the software because each part is developed by different persons. The software can not perform without all parts integrating seamlessly. The software is divided into sections and each sections is developed by an individual. The software is unusable until putting the parts together. | Meet up daily | | The GUI is developed and tested first. The code underneath has to be tested frequently and teammates have to communicate daily in order to keep development on track. The stakeholder wants faster and more efficient collaboration. |

## 3.8 Alternatives and Competition

### None

# 4. Product Overview

The product is a simple turn based board game called CECS BS Challenge Game. In CECS BS Challenge Game, the player poses as a Freshman in college and tries to graduate first to win. To do so, the player needs to obtain 100 quality points first, indicating that the player has finally graduated. The player will be competing against two AI players. The player must meet the conditions listed from game cards in order to earn either skill points or quality points. Skill points help with fulfilling these conditions.

## 4.1 Product Perspective

The product is independent and completely self-contained.

## 4.2 Summary of Capabilities

**Game Functions**

|  |  |
| --- | --- |
| **Functions** | **Description** |
| Draw a game card | Draw a card from a deck at each start of your turn. |
| Move on the board | Move up to 3 spaces on the board. |
| Earn quality points | Get quality points to get you closer to graduating. |
| Earn skill points | Earn skill points to help you play your game cards |
| Play game cards | play cards to earn quality or skill points |
| Lose quality points | lose quality points if you play a card at the wrong time |
| Discard a card | Place a card that you have played into a discard deck |
| Naming | Name your player |

## 4.3 Assumptions and Dependencies

Requires a PC to run this game.

## 4.4 Cost and Pricing

None

## 4.5 Licensing and Installation

None

# 5. Product Features

* Start - Each player is given 5 random cards

## Draw a new Card (May hold up to 7)

* Click through existing cards
* Discard any card
* Choose card to play
* Choose room to move to (Can move up to 3 spaces, or none)
* Earn ‘Quality Points’
* Earn ‘Skill Chips’
* Upon reaching a ‘Quality Point’ value that is divisible by 15, receive ‘Skill Chip’
* ‘Sophomore Cards’ are added when the 3 players have a sum of 60 ‘Quality Points’, some ‘ Freshman Cards’ are removed
* ‘Junior Cards’ are added when the 3 players have a sum of 90 ‘Quality Points’
* ‘Senior Cards’ are added when the 3 players have a sum of 120 ‘Quality Points’
* The game is won by the first player to reach 100 Quality Points.