

CALIFORNIA STATE UNIVERSITY, LONG BEACH
Computer Science and Computer Engineering Department



CECS 343: Introduction to Software Engineering

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Vision of The Illuminati: The Game of Conspiracy

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1. Introduction

- 1.1. Purpose:** The purpose of this document is to provide information for the planning, development and re-creation of “The Illuminati: The Game of Conspiracy” on the PC platform.
- 1.2. Scope:** The programs will be using, but not limited to, are Unity3D, Adobe Photoshop, Adobe Illustrator, and GitHub.
- 1.3. Definitions, acronyms and abbreviations:** As of this point, “Illuminati: The Game of Conspiracy” will be referred to as “Illuminati.”
- 1.4. References:** The documents that will be referenced include the manual/instructions and rulebook that are included in “Illuminati” by Steve Jackson Games.
- 1.5. Overview:** This document will begin with the reason for this project, those who will be affected (stakeholders, users, etc.), a description of the functionality and features of this product and pricing and installation. Potential obstacles will be addressed such as hardware requirements, documentation, risk, and the quality vs the amount of time given during development.

2. Positioning

- 2.1. Business opportunity:** The business opportunity this project will provide is to give players a chance to play “Illuminati” without the purchase of a physical copy, give the developers a project to add to their portfolio for future reference, and provide feedback to the instructor on how useful this project will be in an educational environment.
- 2.2. Problem statement:** The problem of developing and documenting a traditional corporate application for a learning environment potentially hinders students from bringing out their full potential capability in learning and applying their current knowledge of development due to the complexity of such applications. The impact of the problem is how early in the stage students would need to learn this when at this stage. A successful solution would include creating a more entertaining educational environment such as porting a physical board or card game into a potential, fully working digital port for either computers, mobile devices, or both..
- 2.3. Product position statement:** For the avid game enthusiast or student, who is interested in playing role-playing games or game development respectively, the “Illuminati” is a game that would meet their desire to be immersed into a world of mystery, conspiracy, all while on the comfort of a mobile phone or computer. Or for the student, would provide a fun, educational project where the skills they learn can be used in any development environment. Unlike developing a corporate application, our product would provide entertainment to avid game enthusiasts and a enjoyable, memorable learning experience of an application development cycle.

3. Stakeholder and user descriptions

- 3.1. Market Demographics:** A key goal of this product is to provide a digital port to those interested in the actual card game of “Illuminati” and/or interested in the aspect of role-playing card games through digital means. The end goal is to provide a working, finished project to showcase in the portfolio of developers to improve our current reputation as a developer individually.
- 3.2. Stakeholder summary:** List of identified stakeholders.
 - a. Name: Education

Represents: Professor Anthony Giacalone
Role: Oversees the development and provides feedback on the project

- b. Name: Developers
Represents: Nolan Mey, Joanna To, and Matthew Le
Role: Will be developing the game using programming, art, etc.
- c. Name: Card game enthusiasts/Role-players
Represents: Players interested in the game itself
Role: Provide feedback, report bugs.

3.3. User Summary:

- a. Name: Players
Represents: Those who will be playing “Illuminati”
Stakeholder: Card game enthusiasts/Role-players

3.4. User Environment: There will be only 4 people involved this project, the developers (3) and the instructor (1). The task cycle is expected to last about 12 weeks from planning, to concept, to development, then debugging until the game meets minimum standards, and finally release of the product.

4. Product overview

4.1. Product perspective: The game “Illuminati” will be independent and self-contained. Although the actual game itself will be comprised of code with custom artwork and effects at the choice of the developers and within the constraints of time. The gameplay of “Illuminati” will feature role-playing if wanted and the choice of playing with multiple people, where social interaction and immersion would be necessary. This perspective is dependent on the time constraints of development.

4.2. Summary of capabilities:

Customer Benefit	Supporting features
New players can easily learn how to play the game	Included in the game will be a game manual along with rules, instructions, and possibly an interactive tutorial to show the player the basics. Quick tips may be included also with the option to turn them off.
Players can play with friends.	The game may possibly feature multiplayer with other players via online by allowing the user to host their own server via their device.

4.3. Assumptions and dependencies: “Illuminati” has a few factors of dependency. The main dependency that can alter this document is the constraint of time, besides that, other factors include the difficulty and compatibility of IDEs that will be used. If it’s an entirely new IDE, time will be taken to learn how the IDE works.

4.4. Cost and pricing:

“Illuminati” will be initially released on the Android mobile platform for free. Downloadable content such as new cards will be accessible if development continues post-release.

4.5. Licensing and installation: “Illuminati: The Game of Conspiracy” belongs to Steve Jackson Games. Installation will be easy as you only need to install the game through the Google Play Store, which the Unity Engine will provide.

5. **Product features**

- 5.1. **Feature 1:** The ability to click to enlarge the cards (zooming in). This allows the users to view the cards' descriptions and attributes on a user-friendly scale.
- 5.2. **Feature 2:** The ability to load and save the current state of the game. This allows the users to pause and resume the game if needed to maximize convenience.
- 5.3. **Feature 3:** The ability to play through a tutorial. It will explain to the user the rules of the game and how to properly play.

6. **Constraints:** The main constraint that will be faced is timing. This project must be completed within a 12 week period. Because of this, the short amount of time will require the developers to create a solid, structured, but flexible plan to follow through and change depending on the current state of development. Another major constraint is the current knowledge and programming capabilities of each individual developer. If there is limited programming knowledge, this will create a bottleneck in the development time for the "Illuminati" since the developers may not be able to implement features efficiently and effectively and may also need to use such time to learn new programming techniques.

7. **Quality ranges:** The ideal version of "Illuminati" would be to provide an entertaining, optimal role-playing experience with no issues or obstructions in gameplay due to any programming issues. Preferably the game should run without any framerate issues or major power consumption if possible of the device.

8. **Precedence and priority:** The main priority that will be focused on is functional gameplay and user interface. Once this is achieved, creating a main menu with options takes precedence, and from there: multiplayer and post-launch support.

9. **Other product requirements**

- 9.1. **Applicable standards:** Legal and regulatory requirements will only involve giving credit to Steve Jackson Games. Since "Illuminati" is copyrighted, we will be releasing the game free along with possible future downloadable content to avoid infringement.

Supported operating system(s): Android Marshmallow (6.0) or better.

9.2. **System requirements:**

Operating System	Android 4.2 or better
CPU	Qualcomm Snapdragon 800 or better
CPU Speed	2.0GHz or better
RAM	1GB or better
Video	Adreno 200 or better
Free Disk Space	~100 MB

- 9.3. **Performance requirements:** Will require an internet connection to download the game and play. Internet connection will also be required to play with other players if multiplayer is implemented.

- 9.4. **Environmental requirements:** The hardware environment requires the user to pass the device around when their turn ends to another user. This requires patience and negotiation as Illuminati can be an aggressive game. The software environment depends on the amount of cards currently on the board combined with the graphical effects of the game that may potentially affect framerate performance.

10. Documentation Requirements

- 10.1. Release notes, readme file:** Release and patch notes will be included on release and every update that is released to the public. This will be in the form of either “Release Notes”, “What’s New”, or a “readme” file. The source code will be available on GitHub
- 10.2. Online help:** Online help about the game rules can be found at <http://www.sjgames.com/illuminati/>. Any issues or bugs with the game can be reported through our issue tracker on <https://github.com/nmey>.
- 10.3. Installation guides:** Installation guides will be provided upon release.
- 10.4. Labeling and packaging:** Labeling and packaging will be developed along side with the prototype of the game. This will include splash screens, main menu/opening screens, credit to the developers and creators of the game.

11. Appendix 1 Feature attributes

11.1. Status:

Status	Description
Proposed	Create a visual document providing detailed information about the game
Approved	Obtain approval from the project management team (instructor)
Incorporated	Begin game development process.

11.2. Benefit:

Priority	Description
Critical	Providing a fully functional working model of “Illuminati.” Having a working main menu that allows access to the game.
Important	Providing art for the game such as splash screens, effects, etc. Multiplayer capability
Useful	New custom cards that can enhance gameplay.

- 11.3. Effort:** Planning the project along with concept art will require a small amount of time (2-3 weeks). The development time of making the game functional will require the most time (8 weeks or more) as this will require putting in functionality of all the cards. Once these requirements are completed and met, then adding art, menu, splash screen, and credits will require the least amount of time (1-2 weeks). During the course of the entire development cycle, documentation of the code and process will be provided.

11.4. Risk:

Risk	Description
High	Not completing 30% of the development within 12 weeks. This means that the gameplay is not functional and may have multiple issues.

Medium	Not completing 50% of the development within 12 weeks. This means that gameplay is functional and is accessible through a main menu, but does not have any artwork, effects, credits, or options.
Low	Not completing 100% development within 12 weeks. This means that gameplay is functional and accessible, but may or may not have artwork, effects, or credits.

- 11.5. Stability:** The features will be stable upon final release but small updates will be released throughout the game's life in case of any issues or additional custom content.
- 11.6. Target release:**
 Expected Alpha release is April 2017.
 Expected Beta release is April 2017.
 Final product release is May 2017.
- 11.7. Assigned to:** Game prototyping, implementations, and development are assigned to Joanna To, and Matthew Le. Artwork and effects will be assigned to Nolan Mey. Documentation will be done by all developers but reviewed by Nolan Mey.
- 11.8. Reason:** This project (as stated in section 2.1: Business Opportunity) is give players a chance to play "Illuminati" without the purchase of a physical copy, give the developers a project to add to their portfolio for future reference, and provide feedback to the instructor on how useful this project will be in an educational environment. Lastly this project will determine a passing or failing grade of the class.