Illuminati

Project Plan

Project Development Team:

Justin Girgis

Bryan Vu

Steven Gamboa

1.   Overview

1.1. Purpose

The purpose of this Project Plan is to provide essential information of how we will implement the game of Illuminati to a user's home computer. Illuminati originally started out as a standalone card game meant to bring out the competitive side of both young and old players alike. Slowly but surely one side would remain victorious by securing the cards to secret ominous societies, such as the Society of Assassins. However, it has turned into so much more. Illuminati serves to charm the creative and conspiring minds with it's fanatical illuminati group while still maintaining historical elements. Specifically, the product will be made for Windows 7 and 10 64-bit users that have at least version 9 of DirectX installed. According to Gartner Inc(4), a global research and advisory firm, 260 million people can currently support our game when it's released.

We estimate that the game will cost us approximately $15,000 to complete by May 3rd, 2020. In section four of this document, we will break down the specifics of the cost. After that is complete and the investors are happy with the result, we can continue our plan into porting the game for iOS devices before Android. According to The Motley Fool(3), the App Store brings in almost double the revenue of Android's Play Store at about 14 billion in the fiscal year of 2019.

2.   Goals and Scope

2.1. Project Goals

Project Goal	Priority(5 is the highest)	Comment/Description/Reference
Functional Goals:	5	
Create a help page with instructions	2	The game has a long list of instructions, so this will be of great use.

Create a main menu in the game	3	
Create multiplayer capability	4	
QA testing on various Windows 7 and 10 machines	5	
Business Goals:	2	
Limit cost to $15,000	2	
Ensure that the game is optimized to run smoothly on dual core computers	3	The worst case is that a customer has a dual core pc and we want that market to use our product as well.
Technological Goals:	3	
Ensure that the game does not exceed memory usage of 500 MB	3	Once again, this goal is for slower computers that may have only 4 gigabytes of ram.
Quality Goals:	2	
Limit application crashing to a rate of less than 6%	3	
Aesthetically pleasing UX interface	4	Easy to use menu and interface for selecting and placing cards, etc.
Constraints:	3	
A completion date of May 6th, 2020	4	
A small team of 3 developers	2	

2.2. Project Scope

2.2.1   The project and its specific deliverable will be outlined in section 10 and include but is not limited to:

- A Windows executable game that will function on Windows 7 and 10 devices. Specific version numbers will not make a difference in functionality.
- In the main menu, users can access a "Help" page that will guide them through how the game of Illuminati works.
- Using Unity's multiplayer servers, users will be able to play against each on their own computers.

2.2.2   The project will not include:

- Certain aspects of the physical game that are hard to transition into a video game, such as most aspects of cheating. We will, however, implement a "peek" functionality which allows you to momentarily look at another's deck with the caveat that they will know you checked their pile.
- However, other motions such as simply removing a card from their deck will be hard to implement fairly.

3.   Organization

3.1   Organizational Boundaries and Interfaces

Illuminati in its upcoming digital form is done under exclusive licensing rights from Steve Jackson Games. Per our agreement, no changes to the playing cards can be made. Furthermore, game rules are allowed to be reduced and adapted to fit the digital environment, but not to the extent of adding new rules. Final approval is required from Steven Jackson Games before the game is allowed to be published. Also, online video conferences will be available to stakeholders and potential investors once on the first Friday of every month.

3.1.2   Suppliers

Company	Deliverable	Comment
Steve Jackson Games	"Illuminati" the board game	

3.2   Project Organization

3.2.1   Project Manager

Role	Name
Project Manager	Anthony Giacalone
Technical Project Mgr.	Anthony Giacalone

3.2.2   Project Internal-Functions

Function	Name	Comment
Quality Assurance	Bryan Vu	
System Test Lead	Bryan Vu	
Validation Lead	Steven Gamboa	
Configuration Mgmt	Justin Girgis	
Change Mgmt	Steven Gamboa	

3.2.3   Project Team

Name	Availability	Comment
Steven Gamboa	M-F for 4 hours	
Bryan Vu	M-F for 6 hours	
Justin Girgis	M-F for 5 hours	
Anthony Giacalone	T, Th and on-call for help	

4. Schedule and Budget

4.1 Work Breakdown Structure

Dimensions of our Work Breakdown Structure are incompatible with the formatting of this document, thus a pdf version of this document will be made readily available in the Documents section of the Group L GitHub repository, titled as WBS.

Project Gantt chart can be found in the Documents section of the Group L GitHub repository titled as Gantt. Further scheduling and milestone information follows in Section 4.2

4.2 Schedule and Milestones

Milestones below are given effort rankings between 1 to 5. These milestones are ranked between minimal effort and maximum effort, respectively.
*Note that Planned Dates are subject to change (though unlikely and insignificantly) between document revisions

Milestones	Effort	Description	Milestone Criteria	Planned Date
M0		Start Project	Recruit development team	2020-02-01
M0.1	1	Review project description and familiarize with game mechanics	Project requirements established along with stakeholders being identified	2020-02-04

M1		Start Planning	Communication and goals established	2020-02-06
M1.1	3	Vision Document	Initialize objective approach for product implementation and evaluate functionalities to be offered to stakeholders	2020-02-14
M1.2	3	Software Project Plan	Solidify costs of production and timelines for development of product functionality	2020-02-25
M2		Start Execution	Vision document and propositions approved	2020-02-25
M2.1	5	Implementation of approved product features **(listed in Vision Document Section 11)**	Resources committed to product development and testing	2020-04-20
M3		Confirm Execution		2020-04-23
M3.1	3	Stakeholders audit alpha version of product	Architecture and usability are critically observed	2020-04-25
M4		Start Introduction		2020-04-30
M4.1	2	Respond to audit results. Finalize documentation. Prepare for launch.	Stakeholders give final inquiries and determine if any extensions are necessary	2020-05-01
M5		Release Product		2020-05-03
M5.1	3	Launch product for online play. Inspect live-user feedback.	Product ready to be maintained through its lifespan	2020-05-05
M6		Close Project		2020-05-07

More information on specific features (M2.1), such as descriptions, prioritization, and target release dates are available in the Group L Vision Document – Section 11.

4.3 Budget

Category	M0-M1	M1-M2	M2-M3	M3-M4	M4-M5	M5-M6
Human Resources (internal)	3000	9000	34,200	4200	2400	2400
Training	0	1500	0	0	0	0
Game Copyright Licence					$3000	

Assuming each software engineer is being paid $40, working an average of 5 hours a day for 5 days a week

Unity Training is $500 per team member

Game Copyright License is approximately $3000 flat rate

4.4 Development Process

The development and planning progress will be observed and managed according to the discretion of the Project Manager. Otherwise,the provided Work Breakdown Structure, Schedule, and Vision Document can be referenced for feature release dates and milestones.

The development process is currently expected to coincide with Agile Development models Scrum and/or Feature Driven Development. These models are projected to be best fit for a project of this scale and timeline.

4.5 Development Environment

Item	Applied for	Availability by
Methods		
Agile Software	Development Process	M1

Development		
Vision and Project Plan	Defining expectations and project feasibility	M1.2
Use Case	Defining requirements and capabilities	M2
Tools		
GitHub Software Development Platform	File management, version control, team collaboration	M1
Google Drive, Docs, etc.	Documentation and file management	M1
PlanHammer	Project Management and Planning	M1.2
Unity Real-Time Development Engine	Game Platform	M2.1
Languages		
UML	Design	M2
C#	Unity Development	M2.1

4.6 Measurements Program

No measurements program to articulate at this time.

5. Risk Management

The assessment and management of risks is a team-wide goal. Complete and honest communication is expected between team members regarding potential risks and potential solutions to risks. Risk evaluation is encouraged at all times during the project period, through any means of contact, whereas intense elaboration will occur in a face-to-face setting amongst team members. In these settings can a risk be evaluated and a solution be compromised. Risks and solutions will be presented to the project manager should they appear to be sufficiently critical to project development per Vision and Project Plan goals.

In regards to current potential risks, refer to the Group L Vision Document - Section 11.4.

6. Sub-contract Management

There is no projected sub-contracting to be reported. Milestones which state the auditing of the project refer to in-house/team audits with regards to known stakeholders.

7. Communications and Reporting

Types of Communication	Method/Tools	Frequency/Schedule	Information	Participants/Responsibilities
Internal Communication				
Project Meetings	In-Person	6:00-7:15PM Tues/Thurs	Project Status,Problem Risks, Changed Requirements	Project Team Members
Sharing of Project Data	Teleconference	When Available	All Project Documentation and reports	Project Team Members
Milestone Meetings	In-Person	Bimonthly	Project status (progress)	Project Manager, Project Team Members
Final Project Meeting	In-Person		Wrap-up	Project Manager, Project Team Members

8. Deliver Plan

Ident.	Deliverable	Planned Date	Receiver
D1	Vision Document	2/14/2020	Project Manager
D2	Project Plan	2/25/2020	Project Manager

9. Quality Assurance

Scope and intent of team

The project team's goal is to ensure that the project development does not get implemented in a way that is completely astray from the original design specifications. In the event that a team member or the project lead believes the development of this project is deviating from the original plan, they will notify the project members and correct the program to the original path. Proactive error detection and swift reaction to mishaps are a priority to the development team.

10. Configuration and Change Management

Scope and intent of team for Configuration

To ensure steady workflow and stay on time with the schedule and milestones set in section 4, the team members have two meetings per week with the project manager to ensure that the documentation of the project meets specification requirements and vision goals. The team members will evenly split sections of a document to implement and detail the specification of the illuminati game in the vision of the project team. The team member that compiles the other team member's work is in charge of a quality check, ensuring that each team members' sections are detailed and specific with intention. Team members are required to have one individual quality check per week with the project manager to ensure their section of the documentation is completed satisfactorily.

Scope and intent of team for Change Management

The primary goal of the development team is to keep the development of the Illuminati game very similar to how it was planned. In the event that the developers want to deviate from the plan slightly to optimize gameplay, the project member must notify all other project members and must reach a consensus on implementing said change. In addition, changes to the design plan must minimize impact on other factors of the Illuminati gameplay to not disturb development progress. When implementing intentional changes, the project team must consider potential changes in budget, risk, and player usability of the game.

11. Security Aspects

Since the game is going to have join codes generated for devices to join a match of illuminati, there is no personal information stored by the game servers or databases. There is no risk of leaking personal information within the scope of the project.

12. Abbreviations and Definitions

VoIP - Voice over Internet Protocol
- Protocols and method of a user being able to communicate with others over an internet connection, including audio communication

WBS - Work Breakdown Structure
- A breakdown of a project into its smaller components, functioning to aid in organization and management

Gantt Chart
- A bar chart that help visualize a project schedule by visually attaching activities and calendar dates

13. References

*Underlined terms are HyperLinked to their sources
1) Illuminati board game
   - Created by Steve Jackson Games Incorporated
   - Rules version 3.2 (June 2013)
2) Wikipedia on Illuminati
   - Last edited February 23, 2020
3) The Motley Fool on App Store revenue
4) Wikipedia on Gartner, Inc