PROJECT PLAN
FOR
GROUP B

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1. Overview

Illuminati: The Game of Conspiracy is an RPG multiplayer game developed for a fun evening with friends and family. This is the revival of the classic board game developed for our pre-existing fan-base and for the newer digital generation of gamers. Similar to the original game, all players are expected to be physically present and play on the same board rather than from different computers. This product is built on top of the original game with a modified set of rules. With a one-time cost price of $40, this game will provide our community of conspiracy theorists with endless hours of entertainment and free DLC updates for each season.

Our game requires 2-4 players and one computer which supports our game specifications in order to provide a smooth gameplay experience. In this game, users will be assigned a random illuminati card which will come with its own set of goals. Further, each turn allows for a player to perform one of the 9 unique actions and also interfere during other players' turns.

2. Goals and Scope

2.1 Project Goals

Project Goal	Priority	Comment/Description
Functional Goals:		
GUI interface	High	A simple, clean, functioning GUI.
Multiplayer	High	Multiple players can play together on a single computer
Start, Pause, and Exit	Medium	Players may start, pause or exit the game anytime they need.
Theme Music	Low	Background music for menu and loading screen
AI	Low	Artificial Intelligence capabilities. Cnce implemented, this will allow for a single player to play against an artificial intelligence
Online Multiplayer	Low	Allow users to play remotely from their home or during travel
Ranking System	Low	Once online multiplayer is functional, a global ranking

		system will keep track of every player's progress and rewards the top players.
Business Goals		
Time-to-market	Medium	Time expected for game to be released on the market
Cost	Low	Cost will be set in accordance with competing products' price.
Quality	High	Our utmost priority is the quality of gameplay for users
Technological Goals:		
Game Webpage	Medium	An official webpage which provides an insight into the game as well as contact information.
Quality Goals		
Efficiency	High	We expect this game to run without any input or output lag.
Graphical User Interface	High	A simple, clean, functioning GUI.
Testing	Medium	Ensure that the product is in playable condition and suffices all tests.
Audio/Sound	Low	All audio must play without any delay.
Constraints		
Time	High	The development team is bound by a strict deadline
Development Team	Low	Amount of people in the team
User System Requirements	Medium	Users playing at minimal requirements might not receive

		the full experience of the game
Customer Expectations	Medium	For returning customers, changed rules might be an obstacle or take away from the nostalgia of the original board game experience
Changes in requirements	High	Changes requested by advisor pre-release.

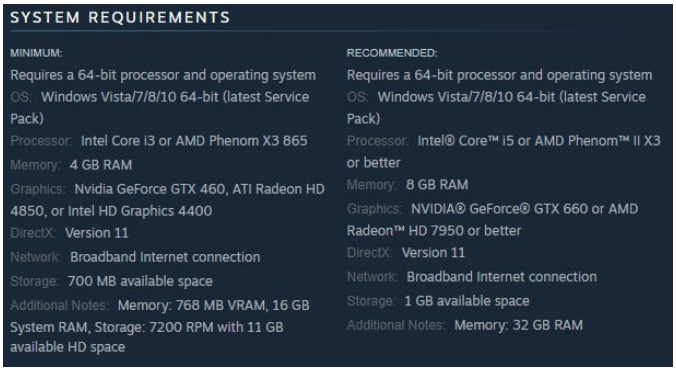
2.2. Project Scope

2.2.1. Included:

All deliverables are listed in the table in section 8.1.

2.2.2. Excluded:

1. **Software**: While the game is backwards compatible, it is recommended that the user stay up-to-date with the latest version of Java to get the best performance benefits from the game.
2. **Hardware**: Every device must support the following requirements:



3. **Operating System**: Windows Vista/7/8/10 (Home/Pro/Pro Education).
4. **Internet**: The user is expected to have a stable internet connection throughout the duration of all downloads (initial game and future DLC's).

3. Organization

3.1. Organization Boundaries and Interfaces:

3.1.1. Receivers

Receivers are listed in section 8.1.

For this project, the receiver will be the advisor for this project as they are the ones grading.

3.1.2. Sub-contractors

There are no sub-contractors required as our product is purely digital.

3.1.3. Suppliers

Company: Contact	Deliverable	Comment
N/A	N/A	N/A

3.1.4. Cross Functions

Function	Dept. Contact	Responsibility/Comment
Product Management	Parth Patel	Product Owner
Marketing	Jonathan Saucedo	Head of Marketing and Advertising
Customer Service	Keval Varia	Head of Department
Development	Keval Varia	Technical Lead
Testing and Quality Control	Jonathan Saucedo	Quality Control Lead

3.2. Project Organization

3.2.1 Project Managers

Role:	Name
Project Manager	Parth Patel
Technical Lead	Keval Varia

3.2.2. Project-internal Functions

Function	Name	Comment
Quality Assurance	Manager: Jonathan Saucedo	Responsible for ensuring that all features developed are necessary for the game.
Product Test Lead	Lead: Jonathan Saucedo	Creates and executes tests for available functionality
Overall Product Development	Manager: Keval Varia	Link between testing team and development team
Front-End Development	Lead: Keval Varia	Develop an outline and then the UI/UX for the

		project
Back-End Development	Lead: Parth Patel	Work with the development team in coding the product

3.2.3. Project Team and Steering Committee

Name	Availability
Parth Patel	Mon-Thu
Jonathan Saucedo	Thu-Sun
Keval Varia	Tue-Frid

4.Schedule and Budget

4.1. Work Breakdown Structure

Refer to the Gantt Chart.

4.2. Schedule and Milestones

Milestones	Description	Milestone Criteria	Planned Date(s)
W0	Start Planning	Initial Team Meeting	2/6/2020
	Discuss product details, goals, and scope.		
W1	Start Documentation	Initial Team Meeting	2/6/2020 2/18/2020
	Start Vision Document Start Project Plan Start Gantt Chart	Discuss proposal and stakeholders	
W2	Development Planning		2/25/2020
	UML Diagram Test Cases		
W3	Additional Documents		2/27/2020
	UML Diagrams		

	Use Cases Testing Planning		
W4	Develop Program Additional Documents	Phase 1	3/5/2020
	Develop GUI Testing Planning		
W5	Back-end development	Code generation and integration	3/17/2020
		Every week between W5 and W6 will be a sprint run, each with its own set of functions	
W6	Testing and Revision		4/23/2020
		Systems Testing Integration Testing Whitebox and BlackboxTesting	
W7	Product Release v1.0	Base Game	5/7/2020
		Release core functionalities of the game to the market	
W8	Product Release v1.1	Theme Music and Quality of Life changes	5/15/2020
		Week #1: quality of life changes Week #2: Add Theme Music	
W9	Product Release v1.2	Artificial Intelligence capabilities	8/8/2020
		Incorporate AI to allow single player gameplay	

		functionalities	
W10	Product Release v1.3	Online Multiplayer	9/10/2020
		Allow players to queue into online games against the world's best conspiracy theorists	
W11	Product Release v1.4	Online Ranking System	10/5/2020
		A ranking system to track all players progress	

4.3. Budget

The budget plan has been broken up by the amount of necessary work required for this project, the amount of people that can work on the project, the amount of time for the necessary work which would be be for every group that we have on board for this project such as Quality Assurance and Software Control and Configuration Group. The budget is split between fixed and variable as follows.

Fixed Budget	Price
3 Computers	$1500
1 Server	$100
Office Rent	$1000

Variable Budget	Price (over 3 months)
Electricity	~$200
Front End Developer	~$1200
Back End Developer	~$3000
Quality Assurance	~$450
SCCG	~$600

Risk Control	~$900

Estimated amount of hours spent on project by:
Frontend developer: 80 hours
Backend developer: 200 hours
Quality Assurance: 30 hours
SCCG: 40 hours
Risk Control: 50 hours

Formula for estimated cost for each team member:
$15 per hour * number of hours logged

Type	Estimated Cost
Fixed	$2600
Variable	$6350
Total Budget	$8950

4.4. Development Process

Our team will be using the Scrum Development Methodology in order to develop this game. An elected scrum master, will lead the development through planning poker in order to assign a cost to each “use case”. If there’s a huge difference between different team member’s answers, then the team further discusses the “use case” and repeats the round with all team members.

4.5. Development Environment

Language	**Applied for**	**Availability by**
Java	Backend development	W6
Tools	**Applied for**	**Availability by**
Jetbrains IntelliJ	Backend development	W5
Gluon SceneBuilder	Graphical User Interface	W4

Wordpress	Online Gameplay	After Product Release v1.0
Github	Source Code Backups and Team Integration	Throughout the project

4.6. Measurements Program

Our measurements are set so that each sprint in our scrum is used as efficiently as possible.

Measurement	Details	Frequency
Meetings	Stand-up meetings will reset the daily progress-bar. Weekly meetings will plan for further sprints and use-cases	Stand-up meetings: Daily Weekly Meetings: Every Tuesday at 6pm
Code Review	Every feature must be reviewed by a peer as part of the testing phase	Before updating either the live-build or test-build
Github Release	Once the core game is developed, each sprint release will be produced as a “github release”.	End of each sprint
Github Updates	All changes must occur on a separate branch and then merged with master when the team approves of the changes.	After updating any project-related file

5.Risk Management

5.1 Project Risks

Possible risks that we have determined for this software are:

- Changes in requirements
- Poor documentation of the code
- Technology not as responsive as planned
- End users resist changes
- Lack of exposure for the program
- Delayed release

- Non reusable code
- Disagreements on implementation with team

5.2. Risk Table

Risks = the type of risk that have been determined
Probability = the likelihood of this risk happening (probability is determined based on how much it will affect the end product and how likely it will occur)
Impact = how detrimental it will be for the team's progression (scale of measure 1 - 4 with 1 being the highest and 4 being the lowest)

Risks	Probability	Impact
Changes in requirements	20%	3
Delayed release	30%	1
Disagreements with implementation	50%	1
End users resist changes	10%	3
Lack of exposure	40%	2
Non reusable code	50%	1
Poor documentation of code	25%	4
Technology not as responsive	10%	2

5.3. Overview of Risk Control Group (RCG)

Risk Control Group will monitor and analyze any possible risks that could occur during development of this program. The requirements for this program will be reviewed and analyzed at least three times to determine the magnitude of the risk. Each risk will undergo a further analysis to determine the impact of the risk to the program. The risks will be documented and a solution to the risk will be devised to have the best course of action taken if this risk should occur. Any risks that have been determined to have an impact of 3 or higher will have measures devised first in advance as this will reduce the impact if the risk were to arise. All risks, regardless of impact, will have a detailed solution to be followed to minimize the risk.

6.Sub-Contract Management

No subcontractor has been chosen for the current goals/state of the game. Sales team will consider this option after the first season of the game.

7.Communication and Reporting

Type of Communication	Method/Tool	Frequency/Schedule	Information	Participants/Responsibilities
Internal Communication				
Project Meetings	In-person meeting	Every Tuesday and Thursday	Project status, completed tasks, changed tasks, risks, future changes	Parth Patel, Jonathan Saucedo, Keval Varia.
Project Meetings	Telecommunication/Discord	Weekly	Discuss weekly progress	Parth Patel, Jonathan Saucedo, Keval Varia.
Development Meetings	Discord	Daily @9am	Discuss assigned “use cases” and any issues in development	Development team
Milestone Meetings	Discord	Before milestones	Project status (progress)	All leads
Project Final Meeting	In-Person meeting	W7	Finalize Product	Keval Varia, Parth Patel, Jonathan Saucedo

8.Delivery Plan

8.1 Deliverables and Receivers:

Ident.	Deliverable	Planned Date	Receiver
D1	Vision Document	2/14/2020	Advisor
D2	Software Project Plan	2/28/2020	Advisor
D3	Gantt Chart	2/28/2020	Advisor

Further deliverables will be added as the Advisor updates requirements.

9. Quality Assurance

The Quality Assurance team is composed of product testers who will ensure that the product does not deviate from the actual design specification. If the team finds something off, they will notify the team to correct that deviation. Product testers will perform full testing and analysis of the product's quality at any individual stage of development. While testing if they find any errors, it will be directed to the game development team for correction.The product testers will directly work with the game development team in group discussions, so they can discuss the errors or enhancements that have been identified. And they will also ensure that the game development team has not deviated from the original design specification. Before deployment of the final version of the game, the product testers will do one more final test of the game to check the quality.

10. Configuration and Change Management

The goal of the Software Change and Configuration Group (SCCG) is to find and control major software changes. This allows any changes made to be properly implemented and any changes made are to be reported to the appropriate groups such as either frontend development team, backend development team, or project manager.

The objective of this group is to help remove any and all unnecessary changes and to oversee and control any necessary changes. This will allow the software development team to focus on finishing the project without having to continuously backtrack leading to a faster delivery time.

By this group overseeing all the changes, they will require specific tests and requirements of the software before any changes are implemented. SCCG will work together with QA to have complete agreement with all changes before any implementation to minimize all possible uncertainty. If QA sees any part of the changes made by SCCG as failing for the requirements and/or tests, SCCG must rework until such requirements and/or tests are resolved.

11. Security Aspects

During testing, the code will go through white-box and black-box tests to ensure that the code is bulletproof enough to stand against any cheats. Additionally, users will be required to install anti-cheat software along with the game which would ensure fair-play and ensure the legitimacy of the game files.

While using our web hosting service (), the user must have a valid profile in order to get access and download Illuminati: The Game of Conspiracy. Since it will

be through a third party provider, we will work alongside Steam in order to ensure that none of their security policies are violated. Steam will also have the power to deal with any proven violation/cheating in any manner they see fit.

12. Abbreviations and Definitions

Abbreviations	Definitions
SCCG	Software Change and Configuration Group
QA	Quality Assurance
RCG	Risk Control Group
DLC	Downloadable Content
RPG	Role Play Game
AI	Artificial Intelligence

13. References

1. Template Project Plan: Professor B. Meyer, Professor P. Kolb “Successful Software Outsourcing and Offshoring”
2. Project Plan Example: “Software Project Plan” provided by our advisor.
3. Gluon Scene Builder: https://gluonhq.com/products/scene-builder/
4. Github: https://github.com/

14. Revision

Revision Index:	Section:	Description:	Name:	Date:
1.0.0	1, 2, 3.1.3., 3.1.4., 3.1.5., 3.1.6., 3.2.	Initial version	Keval Varia	2/18/2020
1.0.1.	3.x, 4, 7, 8	Updated previous sections,	Keval Varia	2/20/2020

		completed, Delivery		
1.0.2	9	Completed section 9	Parth Patel	2/20/2020
1.0.3	1-5	Revise and update each section	Keval Varia	2/20/2020
1.0.4	5,10	Completed section 5,10	Jonathan Saucedo	2/21/2020
1.0.5	4.3	Revised 4.3 - budget	Jonathan Saucedo, Parth Patel	2/22/2020
1.0.6	10 and 11	Detailed documentation	Jonathan Saucedo, Parth Patel	2/25/2020
1.0.7	All sections	Revised all sections	Jonathan Saucedo, Parth Patel, Keval Varia	2/27/2020
1.0.8	All Sections	Final changes before submission	Jonathan Saucedo, Parth Patel, Keval Varia	2/28/2020