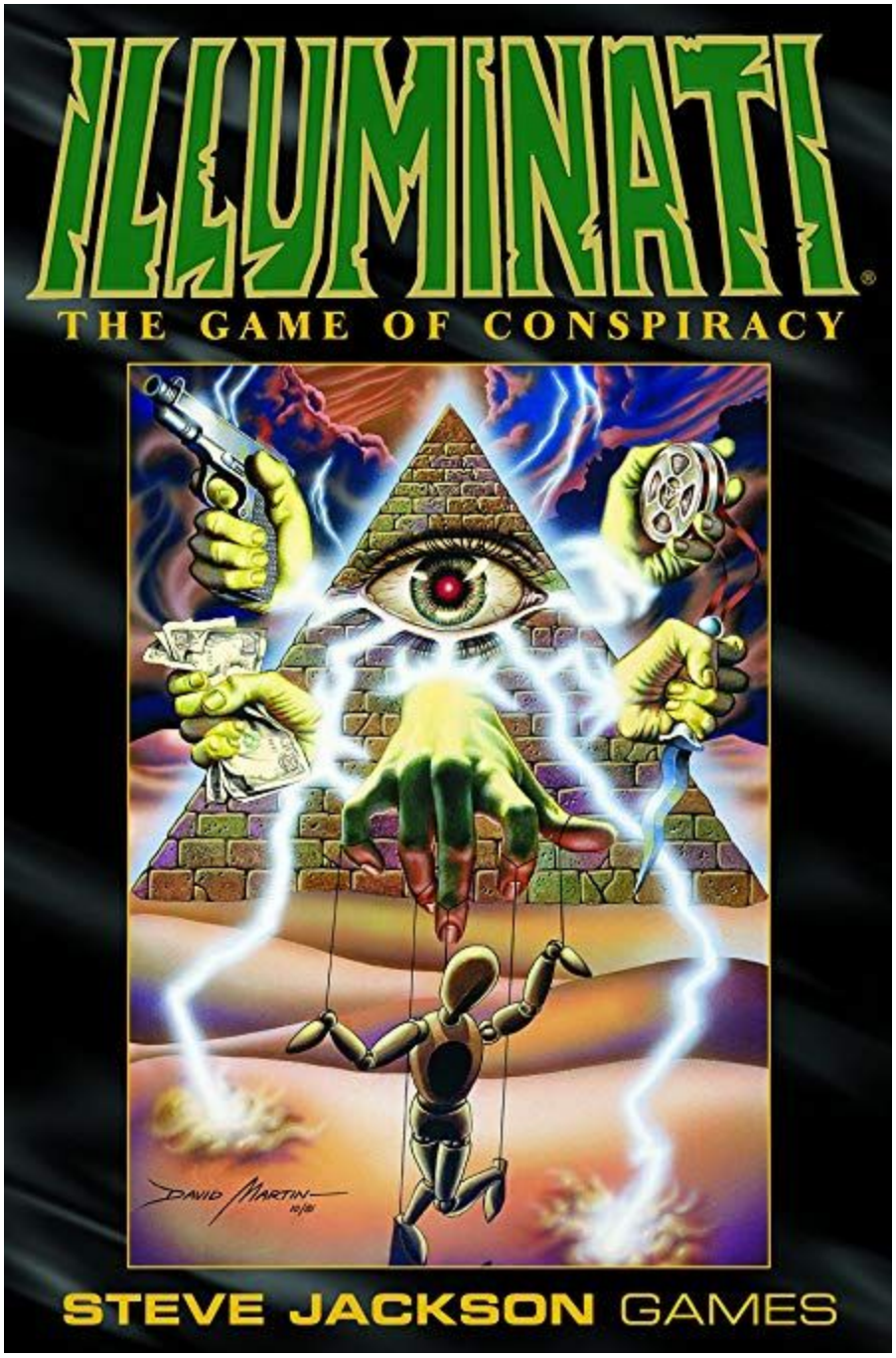
Vision Document

Illuminati



Project Development Team:

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Revision History

Date	Version	Description	Author
2/12/20	<1.0>	Note to teammates:	Matthew Caponi
2/13/20	<1.1>	Added 4. 1	Matthew Caponi
2/13/20 3:53pm	<1.2>	Worked on 1.1-4, 3.1, 3.3,3.4,3.8 and 4.1	Thomas McSwain
2/13/20	<1.3>	Worked on rest of the sections.	Matthew Caponi, Thomas McSwain, Adam Hinkle
2/14/20	<1.4>	Added in Documentation Requirements and Finalized	Matthew Caponi

Table of Contents

1 Introduction

1.1 Purpose

The purpose of this vision document is to outline all aspects of the development process of the Illuminati PC game as well as its economic viability and interest to stakeholders.

1.2 Scope

This document will be the most up to date overview of the product as a whole while also outlining requirements. The project will be using the Unity Game engine with a Community License as the main framework.

1.3 Definitions, Acronyms, and Abbreviations

1.3.1. PC - Personal Computer

1.3.2. Sub-action

Refers to a new action type that will be added to the game, wherein groups can make specific actions against other groups that will help achieve their higher level goals. See 5.1 for more information on this and other updates to the gameplay rules.

1.3.3. Ex. - Example

1.4 References

1.4.1. Illuminati Card Game Wiki

1.4.2. Illuminati Card Game Rules

1.5 Overview

1.5.1. Positioning - Will describe the business opportunity presented by this game.

1.5.2. Stakeholder and User Descriptions - Market, demographic, and user information.

1.5.3. Product Overview - A high level overview of the product and its capabilities.

1.5.4. Product Features - A detailed overview of the features of the game and the differences between the PC version and the original version.

1.5.5. Constraints - Limitations that could impede a customer from playing the game.

1.5.6. Quality Ranges - Description of the reliability of the game.

1.5.7. Precedence and Priority - A hierarchy of the priority of the gameplay features.

1.5.8. Other Product Requirements - A high-level overview of both functional and non-functional requirements necessary to implement the game.

1.5.9. Documentation Requirements - A description of documentation available to help with installation and gameplay assistance.

2 Positioning

2.1 Business Opportunity

“Illuminati” is a card game that was created by Steve Jackson Games in 1982. The game involves players taking control of various groups through their respective Illuminati, with the ultimate aim to acquire total control of the world. This game has fallen out of the public consciousness and is lost to an older era. We seek to revitalize the game by adapting it as a PC strategy game. It would be implemented as a cross between a card/board game and a grand strategy game. While the original cards, some of the rules, and the spirit of the game would be kept intact, we would make some changes to the underlying gameplay to make it more suitable for a modern audience.

2.2 Problem Statement

Today’s PC strategy gaming market is oversaturated with variations of 4K strategy games centered around settlement building and grand strategy games based on outright conquest in historical time periods. Strategy gamers are getting tired of the same genres of strategy games and would welcome the opportunity to play a fresh, unique type of strategy game. A successful PC adaptation of the Illuminati card game would bring some form of new gameplay mechanic to the table that would attract the attention of these weary gamers.

2.3 Product Position Statement

The Illuminati PC game centers around taking control of the world from the shadows by subversively extending your reach and influence through various groups, ranging from the highest levels of the US government all the way down to sci-fi fan groups. Unlike traditional PC

strategy games, players are incentivized to think outside of the box to effectively take control of these groups without drawing too much attention to their grand scheme at play.
Gameplay involves using different groups as a pawns in your plan to influence other groups in a way that creates ripe conditions for taking control. Various elements of the gameplay include, but are not limited to: bribery, espionage, negotiation, threats, assasination, warfare, media campaigns, and more. This offers a unique style of subversive strategy gameplay that would attract the attention of weary strategy gamers looking for new and exciting ways to play.

3 Stakeholder and User Descriptions

3.1 Market Demographics

Potential demographics are any individual who has access to a PC.

Our target demographics are strategy game players and card game players. In making our game more complex, we have decided to narrow down our market demographic more focused to building a core community of dedicated strategy game players and hopefully be able to convert some of the more casual card game players into these long term loyal user groups from which we can continue operations for a longer period of time with our subscription model.

3.2 Stakeholder Summary

Matthew Caponi (33% stake) - Design Lead - Creative Director, Software Engineer - AI

Thomas McSwain (33% stake) - Software Engineer - Network/Backend

Adam Hinkle (33% stake) - Software Engineer - Backend/Frontend

Anthony Giacalone (1% stake) - Advisor

3.3 User Summary

3.3.1 Players: 1-8

3.3.2 Subscribers who pay monthly fees to license the game.

3.4 User Environment

3.4.1. Illuminati will be a PC-based desktop experience that has a standalone app that users must install on their own PC in order to play. Windows 10 only.

3.5 Stakeholder Profiles

Card Game Players

Description	A player who commonly plays traditional card games such as Hearthstone or Magic The Gathering.
Type	This is a player who is used to fast-paced games and strategy going for percentage plays.
Responsibilities	NA
Success Criteria	Success for this group would mean converting some fast-paced card game players into our new cerebral strategy card game.
Involvement	Feedback on prototypes to determine how best to try to accommodate this genre.
Deliverables	The game, Illuminati.
Comments / Issues	Adapting faster card game expectations into our slower but more rewarding game.

Grand Strategy Players

Description	A grand strategy player who comes from a background of games like Civilization, Crusader Kings, and other Paradox Interactive titles.
Type	This is a player who is used to the slow paced gameplay of the Grand Strategy genre but will want lots of depth and strategy.
Responsibilities	NA
Success Criteria	Success for this group would be a deep stragecial game that has a lot of complexities and a high skill ceiling.

Involvement	Feedback on prototypes to determine how best to try to accommodate this genre.
Deliverables	The game, Illuminati.
Comments / Issues	Core demographic.

Casual Players

Description	A casual player who might stumble onto our game.
Type	This is a player who might be unfamiliar with similar genres but happened upon our game through word of mouth or advertising.
Responsibilities	NA
Success Criteria	Success for this group would see some amount of casual players being drawn into the game.
Involvement	Feedback on prototypes to determine how best to try to accommodate this genre and also how approachable the game looks
Deliverables	The game, Illuminati, an easy user experience.
Comments / Issues	This will be a harder group to accomodate for since the game is pretty complex, we will need some way to ease the barrier to entry for newer players.

3.6 User Profiles

See 3.5 (above)

3.7 Key Stakeholder or User Needs

Need	Priority	Concerns	Current solution	Proposed Solutions
Playability	High	The game must be easily playable, this statement is broad but in this context we want the game to be easily started so someone could easily see what the game is about.	1. AI 2. Multiplayer	Pass and Play
Barrier to entry	Medium	The game should be approachable so that our potential to gain users is higher.	1. Subscription 2. Clear Rules 3. Tutorials	Potentially simplify the game
Rewarding Strategy Gameplay	Medium	Veteran strategy gamers will want in depth strategic gameplay that might not appeal to beginners.	1. AI 2. Multiplayer 3. Pass and Play	Difficulty levels.

3.8 Alternatives and Competition

The games we see as a rival to ours are similar games in the Grand Strategy genre as well as some PC card games that have large demographics, such as Magic The Gathering: Arena and Hearthstone, whose large player base we would try to siphon while also being able to attract the hardcore dedicated fan base of Grand Strategy games.

4 Product Overview

4.1 Product Perspective

Illuminati is a stand-alone PC game. It will be written to run on the Windows operating system, specifically Windows 10. It will also have single-player and multiplayer capabilities. Multiplayer will consist of a player either joining an already hosted game or hosting their own game in which up to 7 additional players can join.

4.2 Summary of Capabilities

Customer Benefit	Supporting Features
Play offline	Player vs computer mode

Play with friends	Multiplayer mode
Enhanced gameplay experience	Updated game rules/mechanics

4.3 Assumptions and Dependencies

4.3.1 PC

4.3.2 Keyboard, Mouse

4.3.3 Monitor

4.4 Cost and Pricing

Our main pricing model would probably include a subscription approach. The benefits of such payment models would allow us to keep barriers to entry low while also giving the project a longer lifestyle with support costs and possible future development being supported by our active user base. This also seems to be moving toward the industry standard for low budget and high budget projects alike.

4.5 Licensing and Installation

The licensing model will follow from the subscription model. In order to keep an active license you must continue with the subscription. Installation will be in the form of a standalone executable the user will launch that will install the game and shortcut.

5 Product Features

5.1 Gameplay

The game will incorporate some aspects of the original card game and include some new aspects. The following are changes to gameplay.

5.1.1. Sequence of Play

Original: Collect income, draw a card, take two “actions”, take any “free actions”, transfer money, take special-power actions, and add targets.

PC: Addition of sub-actions (see 5.1.4.1).

5.1.2. Groups

Original: Groups are unorganized.

PC: Groups are categorized into group types. Group types are categories for similar groups. Each group type has its own sub-actions that are specific to that group type. Individual groups can have additional sub-actions.

5.1.3. Attributes and Stats

Original: Each group has an alignment, power, and resistance.

PC: All three will remain.

In addition to these, we will be adding new attributes. These affect the way in which groups can interact with each other and incentivize more sneaky and subversive gameplay. The added attributes and stats are as follows:

5.1.3.1 Corruption

This stat reflects how the public views the corruption levels of a certain group. A high corruption level means that unsavory sub-actions taken against that group are more justified. On the flipside taking unsavory sub-actions against a group with a lower corruption level increases the corruption level of the offensive group.

Example - If a group tries to assassinate the leader of the FBI without proper justification, that group's corruption level will increase. Now other groups are more justified in taking actions, such as asassination, against that group.

5.1.3.2 Justification

This is a stat that is specific to individual sub-actions when taken against a specific group. This stat will be next to sub-actions in the UI that appears when attempting to take a sub-action against a specific group.

Justification reflects how justified this action would be in the public eye. If an action is taken that does not meet the proper justification level, it will increase the corruption level of the offending group.

Sub-actions taken against sufficiently corrupt groups will have higher justification levels than the same sub-action taken against less corrupt groups.

5.1.3.3. Wealth

This is not specifically attributed in the original game, but essentially just represents the sum of all income controlled by a group. Groups with lower levels of wealth are more susceptible to bribery.

5.1.3.4. Diplomacy

This reflects the skill a group has in negotiating with other players. This stat only exists within single-player mode and influences the interactions between a human player and an AI player.

5.1.3.5. Influence

This reflects the ability of a group to trick the public into thinking they are less corrupt than they are. Groups with high influence that make corrupt sub-actions raise the justification levels of aligned groups less.

Example - If a group attacks the FBI leader unjustifiably their corruption levels would rise and typically, all groups will be more justified in taking a typically corrupt action against them.

Let's say the offending group has a "Communist" alignment. Any group with this same alignment will not have their justification levels raised as high pertaining to actions taken against this group, if the offending group had a high influence level. High influence also increases numbers of followers.

5.1.3.6. Followers

This number reflects the following or membership of a group. Groups with a high number of followers get resistance bonuses. Followers also provide immunity to a group from "attack to destroy" and "attack to neutralize" actions.

5.1.4 Actions

5.1.4.1 Sub-Actions

Original: Actions are limited to regular actions and free actions.

PC: Addition of a third action type called the "sub-action".

Sub-actions will have a to-be-determined limit per turn.The differences arises from the way in which a group attempts to take control of another group. Instead

of solely determining the outcome through the difference between power and resistance of each group and a die roll, certain criteria must be met. Once these criteria are met, then the traditional way of attacking to control comes into play, except instead of a die roll, we will be using an internal probability function. In order to meet the criteria needed to take control, sub-actions can be taken.

Ex. In order to take control of the FBI, one potential criteria could be that the FBI leader must be either removed or corrupted. A player could assassinate the FBI leader, but this would risk raising their corruption levels. Another option would be to have their “Tabloid” group run a smear campaign against the FBI leader, and then have one of their wealthy groups bribe the FBI leader. If the FBI leader accepted the bribe, he would be corrupted and that requirement would be met.

Bribing, assassinating, and running a smear campaign are all examples of sub-actions. Each group type has their own sub-actions that can be used by any group within that type, and individual groups also have sub-actions specific to them.

Any sub-action can be taken by any group with no cost (unless it involves money, such as a bribe), but is not guaranteed to work. The probability of a particular sub-action working is calculated based on the interplay of a number of different stats.

Ex. The probability of the FBI leader accepting a bribe could be determined by his own wealth, corruption, and public image. The smear campaign against him is a way of lowering his public image, thus increasing the likelihood of him taking a corrupt action.

Special cards can be used to guarantee that one sub-action will work.

5.1.4.2. Income and Money Transfers

Income will remain the same, although may be represented in larger denominations.

Money transfers may be made among and between groups. Money transferred to lower groups must be transferred down the hierarchical line and can only go down one tier each turn.

5.1.4.3. Attack to Control

The :attack to control" relies on sub-actions meeting the criteria of taking control of a specific group. Once the criteria is met, then an attack to control may be made. It follows the same rules as the original game, except instead of a die being rolled, an internal probability function determines whether or not it is successful. This will have a minor influence on the success of the attack to control, as it will be mostly determined by the criteria being met. .

5.1.4.3. Attack to Neutralize

Attack to neutralize will require criteria to be met. This criteria will be more narrow than attack to control. Examples of criteria are as follows:

- Get enough followers to leave the group.
- Cut off source of income to the group.

These can be realized through various combinations of sub-actions.

Ex. A group could use the "hack to release damaging e-mails" sub-action against a political party. If successful, this could increase the corruption levels of that political party. Groups with high corruption levels lose followers, and the longer the corruption level remains high, the more followers leave the group. This can be countered if a group has a high enough influence.

5.1.4.4. Attack to Destroy

Attack to destroy also requires the following criteria to be met:

- Assassinate all top leaders of the group.
- Use sub-actions to disperse or kill the followers of a group.

These drastic actions make attacks to destroy a very rare action to take. In most cases, a group that took these actions would be quickly destabilized due to their corruption levels maxing out and becoming a target. These types of actions may be strategically more viable during endgame.

5.1.4.5. Interference

PC: Same as original

Can interfere to help attack or to help defend. Interference only applies to major actions. Cannot interfere with sub-actions.

5.1.4.6. Diplomacy

Can negotiate, threaten, and bribe other groups. This is different than sub-actions taken that could involve similar things. Sub-actions involving bribery, for instance, are used to meet criteria needed to make an attack. Group level diplomacy is done in order to achieve high-level objectives such as trading groups, money, artifacts, or special cards. Diplomacy could also be used to form alliances.

Multiplayer: Diplomacy is largely handled through chats with players using a private message system.

Single player AI: Diplomacy takes the form of requesting a certain form of diplomacy and the AI taking into account a wide range of stats to determine how to respond to the diplomatic request..

5.1.4.7. Power Structure

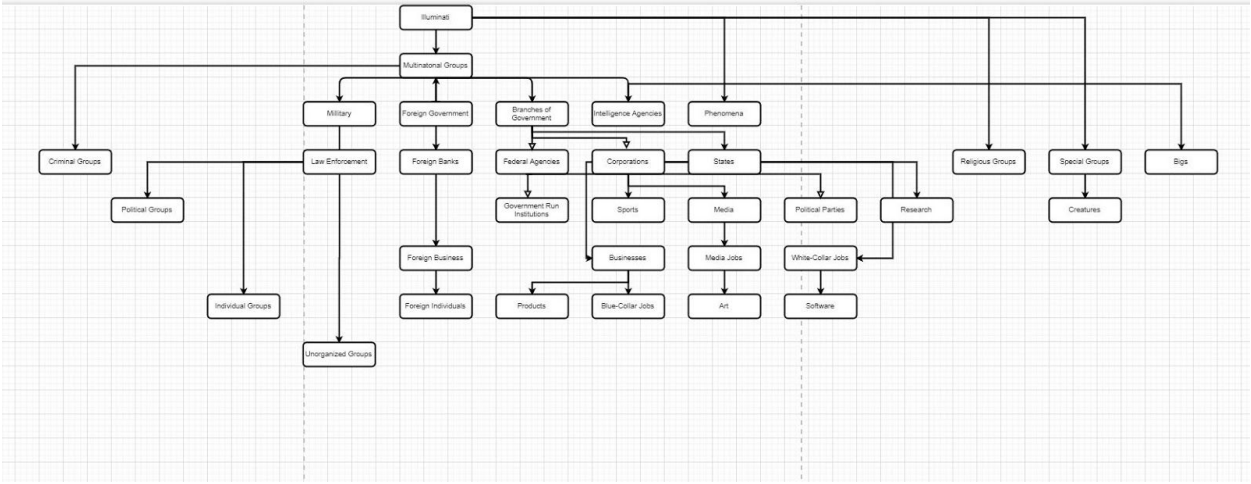
Original: Power structure is based off of alignments of arrows.

PC: Each group type can control a certain number of groups and be controlled by a certain number. Arrow alignments are being dropped from the game. Control limits will just be represented by numbers in the stats window of a group.

Context: Group types will be internally arranged in a hierarchical manner and ranked by tiers. Each tier has certain bonuses and perks. Higher tiers have better stats and can control more groups. Additionally, each group type has a parent group type on a higher tier that gets extra stat bonuses when taking actions against their child groups, if justified. Parent groups do not necessarily control child groups, it just reflects a real-world power dynamic.

Ex. Civilian group types are a child to law enforcement group types. If a civilian group type commits an unjustifiable act, law enforcement group types will get power bonuses when attacking them.

Illustration of this hierarchical dynamic. Note, this is not final and will likely be altered and simplified. This only reflects how the algorithm will classify and determine stats and power dynamics between groups, regardless of who is controlled by who. This does not reflect actual control dynamics within a power structure.



Bonuses are awarded to players who control groups that span a high hierarchical range.

This relates to power structure in the fact that it is recommended to try and control groups in a fashion that is similar to this hierarchical structure, as doing so will increase the reach of a player's illuminati.

Ex. Illuminati could control Girlie Magazines directly if it wanted. However, this is not strategically smart because Girlie Magazines might not be able to take control of any group itself, so the illuminati then wasted a control spot on a group that cannot enable a high hierarchical range.

Low-level groups instead should be taken control of after a hierarchy of control has been established, and used mainly to help higher level groups achieve their control criteria.

Ex. Using tabloids to run smear campaigns.

5.1.5 Leadership

This is a new feature to the PC version. Leadership are individual members of a particular group. As of now, leadership will just be a single person who is in charge of a group. A leader has specific stats that determine how they interact with other players. All stat levels begin at a random baseline and can be changed based on actions taken by and against the leader. The stats are as follows.

5.1.5.1. Public image

A leader with a high public image is less prone to accepting bribes. Reducing a leader's public image is a great way to help the success of sub-actions that require them to act corruptly.

5.1.5.2. Corruption

This determines how likely a leader is to do things such as accepting bribes.

5.1.5.3. Wealth

The level of wealth a leader has also affects their susceptibility to taking corrupt actions. Leaders with low wealth might be more influenced by bribes or other actions that threaten or incentivize their wealth.

5.1.5.4. Susceptibility

This reflects the likelihood of a leader being tricked.

5.1.5.5. Charm

The likelihood of success that a leader will have in romancing another leader.

Certain romancing sub-actions can be taken to help gain control of groups.

This is similar to influence, but on a personal level.

5.1.6. Special Cards

Original: Special cards give stated bonuses.

PC: Special cards will allow a sub-action that falls under that category to be taken with 100% probability for success.

5.1.7. Eliminating a Player

This varies slightly from the original, in that a player must not only destroy every group that they control, but also destroy the illuminati group itself. Large bonuses are awarded to whomever destroys an illuminati.

5.1.8. Winning the Game

Winning by achieving basic goals will be the same as in the original.

Special goals will be modified to reflect our new group type system, instead of alignments.

5.2 Game Assets

Assets include a game board, cards, and money. The cards used in the game are group cards, special cards, and artifacts. The PC version will incorporate most cards from the original game, as well as the expansion pack “Bavarian Fire” and “Y2K”. Cards that are so outdated that they wouldn’t make sense to a modern audience or include stereotypes that are not considered acceptable anymore may be omitted from the game.

5.3 Players

For a single player game, the player may choose up to 7 AI opponents, but must have at least 3. For multiplayer, the player must only have at least one opponent, but can still have up to 7. It is recommended that there be between 4-6 total players for multiplayer, for the ideal experience.

5.4 User Interface

The game will feature a sleek user interface that makes all options very easy to navigate. Some of the UI features are:

5.4.1. Settings

5.4.2. Informational tools for viewing things such as groups controlled players.

5.4.3. Windows that display stats and possible sub-actions for each group.

5.4.3. Diplomacy and chat tools.

5.4.4. A history log of actions that have been taken.

6 Constraints

6.1 Player Count

Games require 4-6 players for the greatest experience. Games of 2, 3, 7, and 8 players are supported but not recommended.

6.2 Connection

Will need an active internet connection in order to play in multiplayer mode. Players can play single player mode with or without an active internet connection.

7 Quality Ranges

7.1 PC Requirements

Will have basic PC Requirements

7.2 Multiplayer

Server will be available 24 hours a day, so long as a player is hosting a game.

8 Precedence and Priority

Priority	**Functional Requirements**	**Non-Functional Requirements**
High	• FN 01 • FN 04-06 • FN 08-11 • FN 13 • FN 07	• NFN 01-03 • NFN 08
Medium-high	• FN 02-03	• NFN 04-05 • NFN 07
Medium-low	• FN 12 • FN 17	• NFN 09

Low	• FN 14 • FN 15 • FN 16	• NFN 06

9 Other Product Requirements

9.1 Functional Requirements

ID	Name	Description
FN-01	Start Pass and Play Game	The most basic version of the game where players play their turn and the pass their device control to another player in order to play. • Requires at least 2 players to the max of 8
FN-02	Start Single Player Game	Single player vs AI players
FN-03	Start Multiplayer Game	Player vs multiple players
FN-04	Exit Game	• Exits the game to desktop • In game exits to menu or desktop
FN-05	Collect Income	• Income is based on the cards the current player controls and happens at start of turn • Requires some money storage for the players groups
FN-06	Draw Cards	• Happens after Collect Income (FN-05)
FN-07	Take Sub-Actions	• Actions taken by a group in order to meet criteria for major actions. • Can be taken at any time after a card has been drawn.
FN-08	Money Transfers	• System to transfer money between the players groups • Can be taken at any time after a card has been drawn.
FN-09	Take Major Actions	• Can be taken at any time after a card has been drawn.
FN-10	Take special-power actions	• Can be taken at any time after a card has been drawn.

FN-11	Add Targets	• Automated by the rules • Not player controlled • Happens after Take Major Actions (FN-10)
FN-12	Whisper System	• Players can either leave each other messages in Pass and Play or send messages in real time on Multiplayer
FN-13	Diplomacy	• Actions such as trading, negotiating, bribing, or threatening. • Can happen at any time after a card has been drawn.
FN-14	Leadership System	• Leaders that can take their own actions and be targeted by sub-actions.
FN-15	Leadership Stats	• Extensive stat system used to determine interactions with other players.
FN-16	Hierarchical Power Dynamics	• Internal representation of power dynamics to affect stats.
FN-17	Follower System	• A system for representing followers of a group.

9.2 Non-Functional Requirements

ID	Name	Description
NFN-01	Assignment Development Requirements	• C# • Unity
NFN-02	Platform	• Desktop App • Windows
NFN-03	Hardware	• Input: mouse/keyboard • Output: monitor
NFN-04	User Interface	• Simple, interactive
NFN-05	Players	• 1-8
NFN-06	Secondary Language Support	• English • Spanish • Vietnamese
NFN-07	Error Handling	• Catch all errors, and

		resolve in real time.
NFN-08	Documentation	• Documentation from each step in development
NFN-09	Response Time	• Game should respond to user actions without noticeable lag-time

9.3 Applicable, System, Performance, and Environmental Requirements

NA

10 Documentation Requirements

10.1 Release Notes, Read Me File

A readme file will be provided for installation purposes.

Release notes will be provided upon each version release.

10.2 Online Help

A web page will be set up with gameplay guides and contact info to receive technical support.

10.3 Installation Guides

A readme file will be provided for installation purposes.

10.4 Labeling and Packages

This will be available for download only. No packaging will exist for this product.

11 Appendix 1 - Feature Attributes

NA.