Diplomacy Desktop App - Vision Document

Jason Nguyen, Ellen Burger, Sadiq Sarwar, Sovathana Heng, Sophana Ek, Vishant Khunti, Chelsea Marfil, Jessica Hilario

Group E

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Professor Anthony Giacalone

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Revision History

Date	Version	Description
2/7/2019	<1.0>	Original document

Table of Contents

1 Introduction

1.1 Purpose

This document will analyze and define the needs and features of our system which will be a digital version of the board game Diplomacy. Our desktop application will be closely similar to the board game version. This document will encompass an overview of the app along with the features of the app. The users that will want to use and develop the app will also be mentioned.

1.2 Scope

To complete our needs for this project, we will be using the Electron framework to build off for our foundation. We will learn the languages HTML, CSS, and JavaScript to build up our app. We will be utilizing a server to be able to host it over the internet for other users to use. The project will be closely built off of the original version, and we will integrate some features from the online version, BackStabbr.

1.3 References

1. *Diplomacy's Manual*, Diplomacy Board Game, BeachBoard, accessed 1/31/2019
2. "BackStabbr", https://www.backstabbr.com/, accessed 1/31/2019

1.4 Overview

This document will talk about the problems that have arised, the state our product is in, and the people that play a vital role in the development and usage of the app. It will go more into depth of what our product is and what we will be incorporating into our product. The tasks that will be done are assigned to certain priorities to adjust ourselves to the needs that are more important to be completed. We will discuss the constraints and requirements that will be set on the product. This document will also include a guide to how our version of the game should be played.

2 Positioning

2.1 Problem Statement

The problem of	People not being able to play Diplomacy in a smooth and concise manner.
Affects	People who enjoy a streamlined gameplay experience and love to play turn-based games.
The impact of which is	People being unable to understand the rules of the game and also being unable to have a reliable and steady environment in which to play the game in.
The ideal solution	A smooth running version of Diplomacy that has minimal lag, an intuitive interface, a comprehensive reference guide, and an implemented chat system.

2.2 Product Position Statement

For	People of all ages who love to play strategy/turned-based games and fans of the original board game.
Who	Want to experience a polished version of Diplomacy with online capabilities.
Diplomacy App	Is a turn based strategy game.
That	Pits players against one another and forces cooperation through alliances. Through these alliances, one person ultimately emerges victorious through strategic investment.
Unlike	Current Diplomacy implementations that have bugs and confusing game design.
Our product	Introduces new users to the game of Diplomacy, as well as offer experienced veterans an enjoyable gameplay experience. This is accomplished through the implementation of classic Diplomacy rules, with some streamlined design implementations for the user interface and

	experience.

3 Stakeholder and User Description

3.1 Market Demographics

Digital board games are very popular these days due to the affordability of electronics and internet access. The target market includes users who like playing games digitally. Anticipated users require a desktop/laptop, the downloaded application, and internet access to use the application.

3.2 Stakeholder Summary

Name	Description	Responsibilities
Requirement Engineers	This stakeholder works with the end users to meet the application requirements.	Make sure the needs and concerns of the end user are acknowledged and addressed in the implementation of the app
Software Architect	This stakeholder is the main lead in the project.	Responsible for overall design and implementation of the project.
Project Manager	This stakeholder leads development of the Diplomacy desktop application	Plans and manage all resources, make decisions and prioritize the tasks.
Project Commissioner	Overseer of the entire project throughout its development	Access the project as it is being developed for assessment.
End Users	These stakeholders are the targeted users for the app who will be playing the game	N/A

3.3 User Summary

Name	Description	Responsibility	Stakeholder
Game Master	Primary End user of the system	Uses application to enforce the game rules	self
Game Player	Primary End user of the system	Uses application to play the game	self
Game Spectator	Primary End user of the system	Use application to oversee the game	self

3.4 User Environment

1. The Diplomacy desktop application will be used by all users who play game digitally, regardless of age and location.
2. The application can be accessed in any location with internet connection.
3. The application shall provide all information needed including game rules, player status, and the game updates.
4. The system shall provide an interface for users to communicate in real time through chat room which can be done in a group chat and individual chat room.

3.5 Stakeholder Profiles

Project Commissioner

Representative	Anthony Giacalone
Description	A person who has assigned a project to a team for completion.
Type	A person who understands the requirements of the project and ensures its completion through the assigned team.
Responsibilities	Overseeing the entire project to ensure that all requirements are met and the project is successfully implemented.

Success Criteria	The project being fully functioning with a unique creative design.
Involvement	Occasionally checking in to see that the assignment is progressing on schedule and evaluating it upon completion.
Deliverables	None
Comments/Issues	None

Requirement Engineer

Description	A person who produces a set of requirements for the project through the acknowledgement of user needs/wants.
Type	A person who is able to understand the projects intentions not only as an engineer, but also as a user.
Responsibilities	Keeping the project on track of meeting all its requirements and goals.
Success Criteria	The project being has met all its intended requirements.
Involvement	Working with all other stakeholders to guarantee the fulfillment of every requirement.
Deliverables	None
Comments/Issues	None

Software Architect

Description	A person who designs the project and brings the objectives to life.
Type	A person who contains the skillset to virtually manufacture the project goals.
Responsibilities	Following project criteria and proper protocol in the creation of the project.

Success Criteria	All the project objectives are fully functioning in software.
Involvement	Developing the project through code and handling any software related issues.
Deliverables	None
Comments/Issues	None

Project Manager

Description	A person who makes sure that all other stakeholders are on task and the project is on track for completion by its given deadlines.
Type	A person who can properly communicate to all stakeholders and relay project information to necessary branches of the team.
Responsibilities	Leading the team towards the right direction for project prosperity.
Success Criteria	All project deadlines have been met and the project is accepted by the project commissioner.
Involvement	Communicating with all stakeholders and other branches of the team to ensure everyone is on task.
Deliverables	None
Comments/Issues	None

End Users

Description	A person who utilizes the final product of the project.
Type	A person who was the intended recipient of the project.
Responsibilities	None

Success Criteria	Satisfaction of the product.
Involvement	None
Deliverables	None
Comments/Issues	None

3.6 User Profiles

Game Master

Description	A person who initiates the game
Type	None
Responsibilities	Add players into the the game room.
Success Criteria	All players have been added to the game.
Involvement	None
Deliverables	None
Comments/Issues	None

Game Player

Description	A person who plays in the game.
Type	None
Responsibilities	Play the game and follow the rules.
Success Criteria	Player is enjoying him/herself
Involvement	None
Deliverables	None
Comments/Issues	None

Game Spectator

Description	A person who watches an ongoing game.

Type	None
Responsibilities	Watch the game and not interfere.
Success Criteria	Able to watch the game through an overlooking perspective.
Involvement	None
Deliverables	None
Comments/Issues	None

3.7 Key Stakeholder or User Needs

| Need	Priority	Concern	Current Solutions	Proposed Solution
Intuitive to play	High	Players should be able to play the game without have to read too many instructions, provided that they know the game rules.	See proposed solution.	Make map clickable, keep the number of buttons at minimum. The amount of text should be less than pictures.
Flexible number of players	Medium	Game should not require to have 7 players to be able to play.	See proposed solution.	Unassigned countries will hold their position for every turn.
Play on mobile device or browser	Low	Players should be able to play the game on their mobile device or a browser.	See proposed solution.	Adjust the interface when the system detects that the user is playing on a mobile device or web

				browser.

3.8 Alternatives and Competitions

Backstabbr: Online website for hosting diplomacy games. Requires an account. Simple interface.

Diplomacy board game: Original physical game. User-intensive due to lack of automation. Must play in person or through a messaging service.

4 Product Overview

4.1 Product Perspective
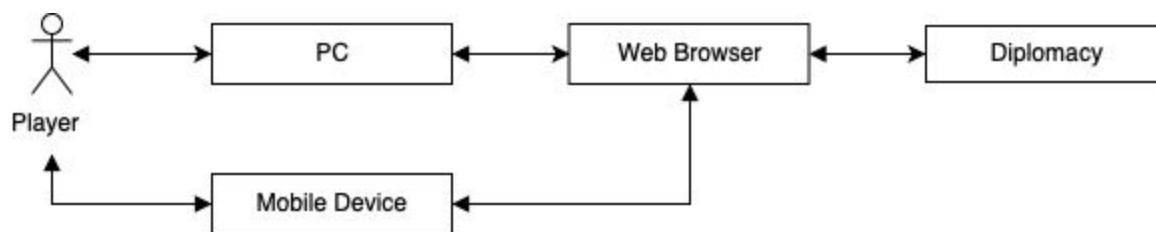
Overview of the Diplomacy System

4.2 Summary of Capabilities

Customer Benefit	Supporting features
Players can play from whatever location they are at - no need to gather around in one location.	Host game on a server.
Ease of communication between players to discuss strategies.	Live chat functionality - private chats and group chats.
Synchronous game play - all players play at the same time.	Automatic refresh of game when all players submit their orders.
Ability to spectate game.	Functionality to enter game ID to join a specific game.

Gives the user more of an awareness of other players' activity in the game.	Shows who hasn't yet submitted orders.
Possible cross-device capability.	The electron framework allows for the flexibility to be compatible with mobile devices and in a browser.

4.3 Assumptions and Dependencies

- User is on a Mac, Windows, or Linux device.
- User has downloaded the desktop app and has connection to the internet.

4.4 Licensing and Installation

The app will need to be installed - may provide an executable file in our GitHub repo.
No license.

5 Product Features

5.1 System Features

1. Enter game
2. Create game
3. Join game
4. Enter game ID
5. Connect to server
6. Disconnect to main menu
7. Spectate game
8. In-game text chat
9. Save current game
10. View Diplomacy rules

5.2 Gameplay Features

1. Set round time limit
2. Start game
3. Clickable European map to order units

4. Unit: hold, move, support, convoy
5. Create new units
6. End game options: surrender, one-player victory, two-player victory, etc.

5.3 Automatic Gameplay Features

1. Assign player nations
2. Synchronous turns: auto-end round at the end of time limit
3. Auto-write Diplomacy orders based on map selections
4. Validate unit actions
5. Check attack strength
6. Change seasons
7. Update controlled supply centers
8. Initiate new unit creation
9. End game: one player controls eighteen supply centers

6 Constraints

In order to play the game, the user must own a computer that has strong internet connectivity as without it, users may struggle with receiving proper server response. The game will be highly dependent on the user being able to make their moves within the allotted time. Therefore, users need to allocate time for themselves in order to play the game. The experience of the gameplay will also highly depend upon the environment in which the user is playing the game. This game is expected to be played at the comfort of the ones home, where the users could play the game in a relaxed setting.

7 Quality Ranges

There are at most seven players and one game master that can join a game. There will be one game that can be played on our server at a time. Although game master can overlook the game play, this role is not required for players to be able to play the game. The game can still be played as long as there are at least two players. During the gameplay, if any player lose their connection, he will simply lose the game and other players can continue to play the game without any interruption.

8 Precedence and Priority

High	● Enforce the rules of movement, attack, seasons, etc… ● Have a timer to force users to submit orders ● Let users interact with region through mouse clicks ● Synchronous gameplay ● Show who hasn't submitted orders ● Display the in-game map ● Show the starting supplies of a user's country
Medium	● Game music ● Game legend to identify different players
Low	● Be compatible with mobile devices. ● Be compatible with internet browsers. ● Warn users about an invalid move before they make it. ● In-game chat

9 Other Product Requirements

9.1 Applicable Standards

Not applicable.

9.2 System Requirements

Desktop or laptop environment.
Specs: Sure.

9.3 Performance Requirements

TBD

9.4 Environmental Requirements

All players should be playing at same time due to the time limit.

10 Documentation Requirements

10.1 Release Notes, Read Me File

See our GitHub repository for our README file:
https://github.com/JessicaHilario/475Diplomacy

10.2 Online Help

Players can refer to the user manual which can be found in our application or GitHub page.
Players can also find FAQs section in our app.

10.3 Installation Guides

The user will need to install the desktop app. We will provide a detailed installation guide on our
GitHub in the future.

11 Appendix I

11.1 Status

Status	Description
Proposed	1. In-game text chat 2. Mobile compatibility 3. Browser compatibility
Approved	1. Desktop client 2. No account requirement 3. Game manual and FAQ 4. Spectator mode
Incorporated	None yet implemented.

11.2 Benefit

Priority	Description
Critical	1. Server to host games 2. Accurate Diplomacy recreation 3. Creation and joining of game sessions
Important	1. No account requirement 2. Auto-write commands for actions
Useful	1. Game manual and FAQ 2. Validate actions before taking them 3. Spectator mode

11.3 Effort

Two weeks to create vision document and accompanying docs. Four weeks to develop. Few additional weeks to finalize product.

11.4 Risk

Delays in development due to lack of experience with various languages, server issues, or other unexpected hurdles.

11.5 Stability

Final product server type, client type, and compatibilities still under review.

11.6 Target Release

Finished product release date: 5/9/18.

11.7 Assigned To

Tasks evenly split up among eight team members.

11.8 Reason

Game idea and rules lifted from Diplomacy.