



# Diplomacy Desktop App - Vision Document

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

Group E

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Professor Anthony Giacalone

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# 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 implement 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 desktop app. We will be utilizing a server to create the game for users to play. The project will be closely built off of the original board game 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 arisen, 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

<i><b>The problem of</b></i>	People not being able to play Diplomacy in a smooth and concise manner.
<i><b>Affects</b></i>	People who enjoy a streamlined gameplay experience and love to play turn-based games.
<i><b>The impact of which is</b></i>	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.
<i><b>The ideal solution</b></i>	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

<i><b>For</b></i>	People of all ages who love to play strategy/turned-based games and fans of the original board game.
<i><b>Who</b></i>	Want to experience a polished version of Diplomacy with online capabilities.
<i><b>Diplomacy App</b></i>	Is a turn based strategy game.
<i><b>That</b></i>	Pits players against one another and forces cooperation through alliances. Through these alliances, one person ultimately emerges victorious through strategic investment.
<i><b>Unlike</b></i>	Current Diplomacy implementations that have bugs and confusing game design.
<i><b>Our product</b></i>	Introduces new users to the game of Diplomacy, as well as offers 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.
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## 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 desktop 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 manages all resources, makes decisions and prioritizes 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

<b>Name</b>	<b>Description</b>	<b>Responsibility</b>	<b>Stakeholder</b>
Game Host	Primary End user of the system	Uses the application to start a game session and play the game	self
Game Player	Primary End user of the system	Uses application to play the game	self
Game Spectator	Primary End user of the system	Uses application to oversee/watch the game.	self

### 3.4 User Environment

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

### 3.5 Stakeholder Profiles

#### Project Commissioner

<b>Representative</b>	Anthony Giacalone
<b>Description</b>	A person who has assigned a project to a team for completion.
<b>Type</b>	A person who understands the requirements of the project and ensures its completion through the assigned team.



<b>Responsibilities</b>	Overseeing the entire project to ensure that all requirements are met and the project is successfully implemented.
<b>Success Criteria</b>	The project being fully functioning with a unique creative design.
<b>Involvement</b>	Occasionally checking in to see that the assignment is progressing on schedule and evaluating it upon completion.
<b>Deliverables</b>	None
<b>Comments/Issues</b>	None

#### Requirement Engineer

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

#### Software Architect

<b>Description</b>	A person who designs the project and brings the objectives to life.
<b>Type</b>	A person who contains the skillset to virtually

	manufacture the project goals.
<b>Responsibilities</b>	Following project criteria and proper protocol in the creation of the project.
<b>Success Criteria</b>	All the project objectives are fully functioning in software.
<b>Involvement</b>	Developing the project through code and handling any software related issues.
<b>Deliverables</b>	None
<b>Comments/Issues</b>	None

#### Project Manager

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

#### End Users

<b>Description</b>	A person who utilizes the final product of the project.
<b>Type</b>	A person who was the intended recipient of

	the project.
<b>Responsibilities</b>	None
<b>Success Criteria</b>	Satisfaction of the product.
<b>Involvement</b>	None
<b>Deliverables</b>	None
<b>Comments/Issues</b>	None

### 3.6 User Profiles

#### Game Host

<b>Description</b>	A person who creates a game session and plays the game.
<b>Type</b>	End User
<b>Responsibilities</b>	Share the generated game ID with people who want to join their game.
<b>Success Criteria</b>	A game can be created and a game ID is generated to be shared.
<b>Involvement</b>	None
<b>Deliverables</b>	None
<b>Comments/Issues</b>	None

#### Game Player

<b>Description</b>	A person who plays in the game.
<b>Type</b>	End User
<b>Responsibilities</b>	Play the game and follow the rules.
<b>Success Criteria</b>	Player is enjoying him/herself and is able to smoothly carry out all the functionalities of the app.

<b>Involvement</b>	None
<b>Deliverables</b>	None
<b>Comments/Issues</b>	None

#### Game Spectator

<b>Description</b>	A person who watches an ongoing game. A person becomes a spectator when the maximum number of Game Players (7) are in the game already.
<b>Type</b>	End User
<b>Responsibilities</b>	Watch the game and don't interfere.
<b>Success Criteria</b>	Able to watch the game through an overlooking perspective.
<b>Involvement</b>	None
<b>Deliverables</b>	None
<b>Comments/Issues</b>	None

### 3.7 Key Stakeholder or User Needs

<b>Need</b>	<b>Priority</b>	<b>Concern</b>	<b>Current Solutions</b>	<b>Proposed Solution</b>
Intuitive to play	High	Players should be able to play the game without the need 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	Low	Game should	See proposed	Unassigned

of players		not require to have 7 players to be able to play.	solution.	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.

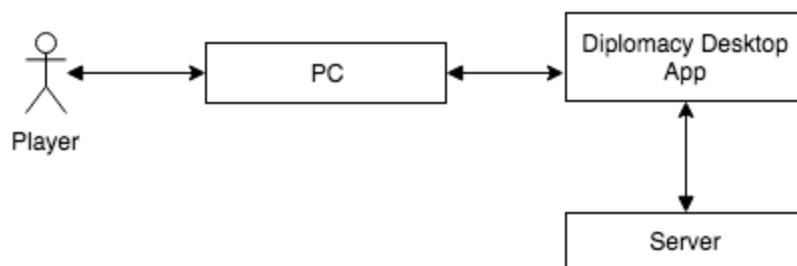
### 3.8 Alternatives and Competitions

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
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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 overlook the game after the maximum number of players (7) has been reached.
Gives the user more of an awareness of other players' activity in the game.	Shows who has and hasn't 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. Create game
2. Join game
3. Enter game ID
4. Connect to server
5. Disconnect to main menu

6. Spectate game
7. In-game chat
8. Save current game
9. 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 a 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 one's home, where the users could play the game in a relaxed setting.

## 7 Quality Ranges

Only seven users are allowed to be Game Players, no more or no less. Anyone who joins the game with game ID after there are already seven players will automatically be Game Spectators. There will be one game that can be played on our server at a time. During the gameplay, if any player loses their connection, he/she will lose the game and other players can continue to play the game without any interruption.

## 8 Precedence and Priority

High	<ul style="list-style-type: none"><li>• Enforce the rules of movement, attack, seasons, etc...</li><li>• Have a timer to force users to submit orders</li><li>• Let users interact with region through mouse clicks</li><li>• Synchronous gameplay</li><li>• Show who has and hasn't submitted orders</li><li>• Display the in-game map</li><li>• Show the starting supply centers of a user's country</li></ul>
Medium	<ul style="list-style-type: none"><li>• Game music</li><li>• Game legend to identify different players</li><li>• In-game chat</li></ul>
Low	<ul style="list-style-type: none"><li>• Be compatible with mobile devices.</li><li>• Be compatible with internet browsers.</li><li>• Warn users about an invalid move before they make it.</li></ul>

## 9 Other Product Requirements

### 9.1 Applicable Standards

Not applicable.



## 9.2 System Requirements

Desktop or laptop environment with Mac OS, Linux, or Windows operating systems. Good internet connectivity is needed for proper server response.

Specs: N/A.

## 9.3 Performance Requirements

This will be determined when we have fully developed the application and have tested it on our machines.

## 9.4 Environmental Requirements

All players should be playing at the 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 and GitHub page.

## 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
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Proposed	<ol style="list-style-type: none"> <li>1. In-game text chat</li> <li>2. Mobile compatibility</li> <li>3. Browser compatibility</li> </ol>
Approved	<ol style="list-style-type: none"> <li>1. Desktop client</li> <li>2. No account requirement</li> <li>3. Game user manual and FAQ</li> <li>4. Spectator mode</li> </ol>
Incorporated	None yet implemented.

## 11.2 Benefit

Priority	Description
Critical	<ol style="list-style-type: none"> <li>1. Server to create games</li> <li>2. Accurate Diplomacy recreation</li> <li>3. Creation and joining of game sessions</li> </ol>
Important	<ol style="list-style-type: none"> <li>1. No account requirement</li> <li>2. Auto-write commands for actions</li> </ol>
Useful	<ol style="list-style-type: none"> <li>1. Game manual and FAQ</li> <li>2. Validate actions before taking them</li> <li>3. Spectator mode</li> </ol>

## 11.3 Effort

Three weeks to create documentation including vision document, project plan, use cases, test plan, test cases, and user manual. Two weeks to implement a prototype. Four weeks to implement the completed application. Few additional weeks to finalize product.

## 11.4 Risk

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

## 11.5 Stability

Final product server type, client type, and compatibilities are 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 the Diplomacy board game.