

Web Diplomacy

Requirements Specifications



Diplomats

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Course: CptS 322 - Software Engineering Principles I

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I. Introduction

In this project we will create a web version of the classic board game Diplomacy. This will allow users to play the board game online with other players in any location.

Document Revision History

Rev 1.0 2017-09-24 Initial Version

II. Requirements Specification

1. Customer, Users, and Stakeholders

Customer: Anyone who wants to play the board game Diplomacy online

Users: Anyone attempting to use our **platform**

Members: users who are signed into an account

Players: a member who is in a game

Stakeholders: The team

2. User Stories

NOTE: we will fill in variables during the first iteration when we know more about the limitations.

TODO Iteration for each Story

| | |
|------------------|---|
| Name | Signup |
| Actors | Users |
| Triggers | User requesting an account to this site |
| Preconditions | User is not a member User is at login screen |
| Actions | 1. System takes the user to the create account page 2. User inputs account information 3. System shows the user that the account has been made 4. User acknowledges creation 5. System takes the user to the Join Game page |
| Postconditions | 1. User is signed in to their new account 2. System considers User as Member 3. User is on the Join Game page |
| Acceptance Tests | <ul style="list-style-type: none">● System does not accept duplicate members● System does not accept mismatched passwords |

| | |
|-----------|---|
| Iteration | 3 |
| Alt paths | <ol style="list-style-type: none"> 1. The username is already taken 2. The user cancels 3. Haven't provided enough information 4. Some input is invalid |

| | |
|------------------|---|
| Name | Login |
| Actors | Users |
| Triggers | User requests to be logged in |
| Preconditions | User is not a Member |
| Actions | <ol style="list-style-type: none"> 1. User inputs account information 2. System verifies account information to be a valid account 3. System considers User a Member 4. System takes User to the Join Game page |
| Postconditions | User is now a Member and on the Join Game page |
| Acceptance Tests | <ul style="list-style-type: none"> ● System does not accept non-existent account information ● User is now a Member ● Member is on the Join Game page |
| Iteration | 3 |
| Alt Paths | <ul style="list-style-type: none"> ● User's account information is invalid |

| | |
|---------------|--|
| Name | Logout |
| Actors | Member |
| Triggers | Member wants to log out |
| Preconditions | Member is logged and in Join Game Page |
| Actions | <ol style="list-style-type: none"> 1. System considers Member as User 2. System takes User to Login page |

| | |
|------------------|--|
| Postconditions | Member is a User User is taken back to the login page |
| Acceptance Tests | Member is now a User User is now on Login page |
| Iteration | 3 |
| Alt paths | None |

| | |
|------------------|---|
| Name | Join Game |
| Actors | Members |
| Triggers | Member wants to play a game |
| Preconditions | <ul style="list-style-type: none"> There are at least n members who want to play |
| Actions | <ol style="list-style-type: none"> System generates game with $x > n$ members System considers members as players Players are taken to game page |
| Postconditions | Players are at the game page with the newly created game |
| Acceptance Tests | Player is in new game with $x > n-1$ other players |
| Iteration | 2 |
| Alt Paths | None |

| | |
|------------------|---|
| Name | View Rules |
| Actors | Members |
| Triggers | Member would like to review the rules of the game |
| Preconditions | <ul style="list-style-type: none"> Member is on the Join Game page |
| Actions | <ol style="list-style-type: none"> System displays the rules to the Member |
| Postconditions | Member is on the rule page |
| Acceptance Tests | The Member can view the rules of the game |

| | |
|-----------|------|
| Iteration | 1 |
| Alt Paths | None |

| | |
|------------------|---|
| Name | Create an Order |
| Actors | Player |
| Triggers | Player selects one of their own units |
| Preconditions | <ol style="list-style-type: none"> 1. Player has not confirmed their orders 2. The unit must be one that the player controls |
| Actions | <ol style="list-style-type: none"> 1. System prompts player for which order to give 2. The player chooses an order 3. The system asks further information to fulfil all of the orders requirements 4. Player gives additional information as prompted 5. System validates order 6. System accepts order 7. System places order on unit and overrides any existing order 8. System marks unit as being ordered |
| Postconditions | <ol style="list-style-type: none"> 1. Unit is marked as having been ordered 2. System accepts order |
| Acceptance Tests | <ol style="list-style-type: none"> 1. System cannot accept invalid orders 2. System has order placed on the unit 3. The unit is marked as being ordered |
| Iteration | 1 |
| Alt Paths | <ol style="list-style-type: none"> 1. Player cancels order 2. Player provides invalid information for order |

| | |
|----------|-----------------------------------|
| Name | Commit Orders |
| Actors | Player |
| Triggers | Player requests to confirm orders |

| | |
|------------------|---|
| Preconditions | |
| Actions | <ol style="list-style-type: none"> 1. System locks in players orders 2. All of the player's units are marked as given orders 3. Players are no longer allowed to change orders 4. System waits for all players in the game to confirm orders 5. System updates gameboard for all players 6. System asks players where they would like to relocate units, add units and/or which units to lose, if applicable 7. Players respond with necessary information. 8. System removes all orders from units 9. System marks units as unordered 10. Players are now allowed to give orders again |
| Postconditions | <ol style="list-style-type: none"> 1. Gameboard is updated updated for all players 2. Players are allowed to give orders 3. No units are marked as having been given orders 4. No units have orders assigned to them |
| Acceptance Tests | <ol style="list-style-type: none"> 1. Players are allowed to give orders 2. No units are marked as having been given orders 3. No units have orders assigned to them 4. System waits until all players have confirmed orders 5. The gameboard is updated for all players 6. Players cannot give orders while system is waiting 7. System correctly adds/removes/relocates units |
| Iteration | 1 |
| Alt paths | <ol style="list-style-type: none"> 1. A player leaves the game |

| | |
|---------------|---|
| Name | Exit game |
| Actors | Player |
| Triggers | Player requests to exit game |
| Preconditions | |
| Actions | <ol style="list-style-type: none"> 1. System confirms Player would like to leave 2. User acknowledges that they would like to leave 3. System removes Player from game 4. System considers Player as Member |

| | |
|------------------|---|
| | <ol style="list-style-type: none"> 5. System takes Member to Join Game page 6. System removes all of the Player's units from the game |
| Postconditions | <ol style="list-style-type: none"> 1. Member is on the Join Game page 2. Member is no longer in the game 3. Member's units are no longer a part of the game |
| Acceptance Tests | <ol style="list-style-type: none"> 1. Player becomes a Member 2. Warning about player leaving game is shown when player requests to exit the game 3. Member is on the Join Game page 4. Players units are removed from game board |
| Iteration | 2 |
| Alt Paths | <ol style="list-style-type: none"> 1. Player declines leaving |

| | |
|------------------|---|
| Name | Timeout |
| Actors | Player |
| Triggers | Player has not performed any actions in the last 3 minutes |
| Preconditions | Player has not confirmed orders |
| Actions | <ol style="list-style-type: none"> 1. System warns Player that they will be timed out in 30 seconds 2. System waits for 30 seconds 3. System removes Player from game 4. System considers Player as Member 5. System takes Member to Join Game page 6. System removes all of the Player's units from the game 7. System notifies the Member that they were timed out |
| Postconditions | <ol style="list-style-type: none"> 1. Member is on the Join Game page 2. Player is now a Member 3. Member is on the Join Game page 4. Players units are removed from game board |
| Acceptance Tests | <ol style="list-style-type: none"> 1. Player is warned about being timed out 2. Player becomes a Member 3. Warning about player leaving game is shown when player requests to exit the game 4. Member is on the Join Game page |

| | |
|-----------|--|
| | 5. Players units are removed from game board 6. The Member is notified of being timed out |
| Iteration | 2 |
| Alt Paths | 1. User interacts with the system before 30 seconds expires |

3. Non Functional Requirements

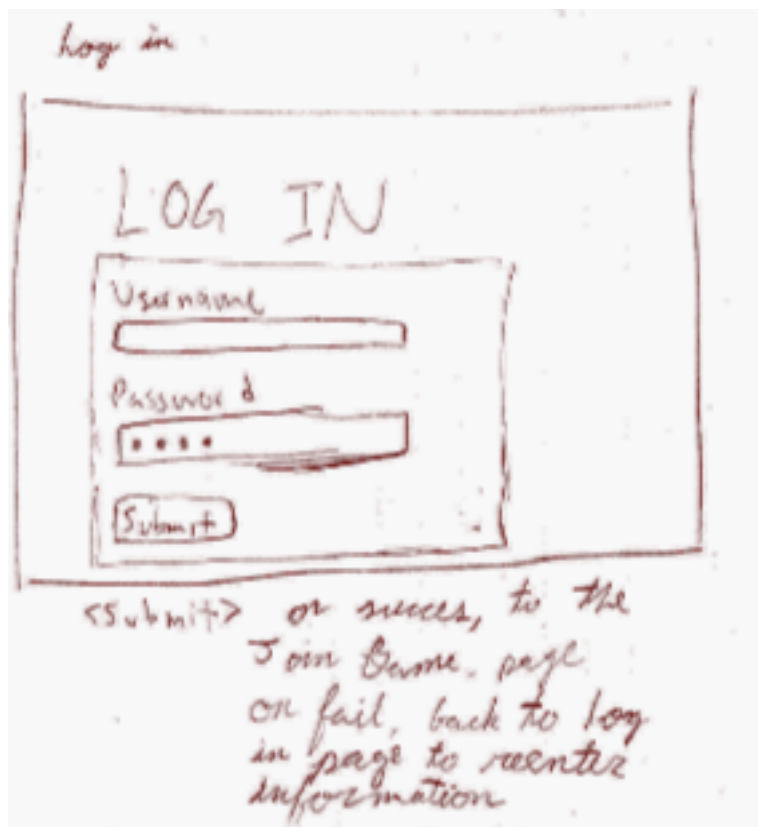
Needs to be played on desktop

Must have an internet connection for the game.

Rules (in references) will be implemented in game.

III. User Interface Requirements

Login page first page the user will see(have prompts to login and create account)



Sign up page will allow a user to sign up for an account

sign up

SIGN UP

Username

Password

Password (re-type)

Submit

Cancel

<submit> on success, to the join game page.
on fail, user is prompted to reenter information
<cancel> Back to the log in page.

Join game page (where the user will ask to join a game)

Join Game Page (Not in Queue)

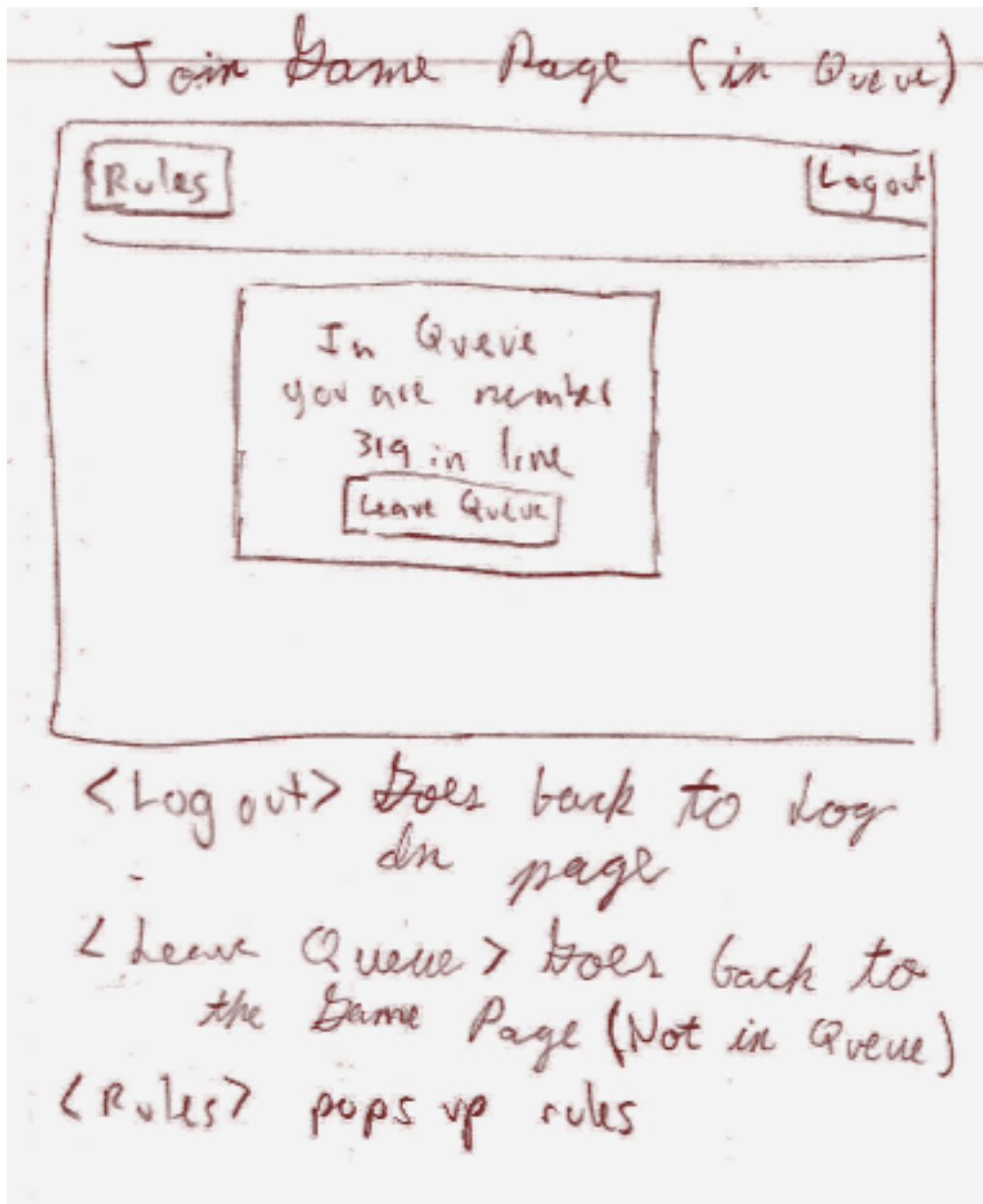
| | |
|---------------------|------------|
| <u>Rules</u> | Log out |
| Users in Queue 3/18 | Join Queue |

<Log out> Goes back to Log in Page

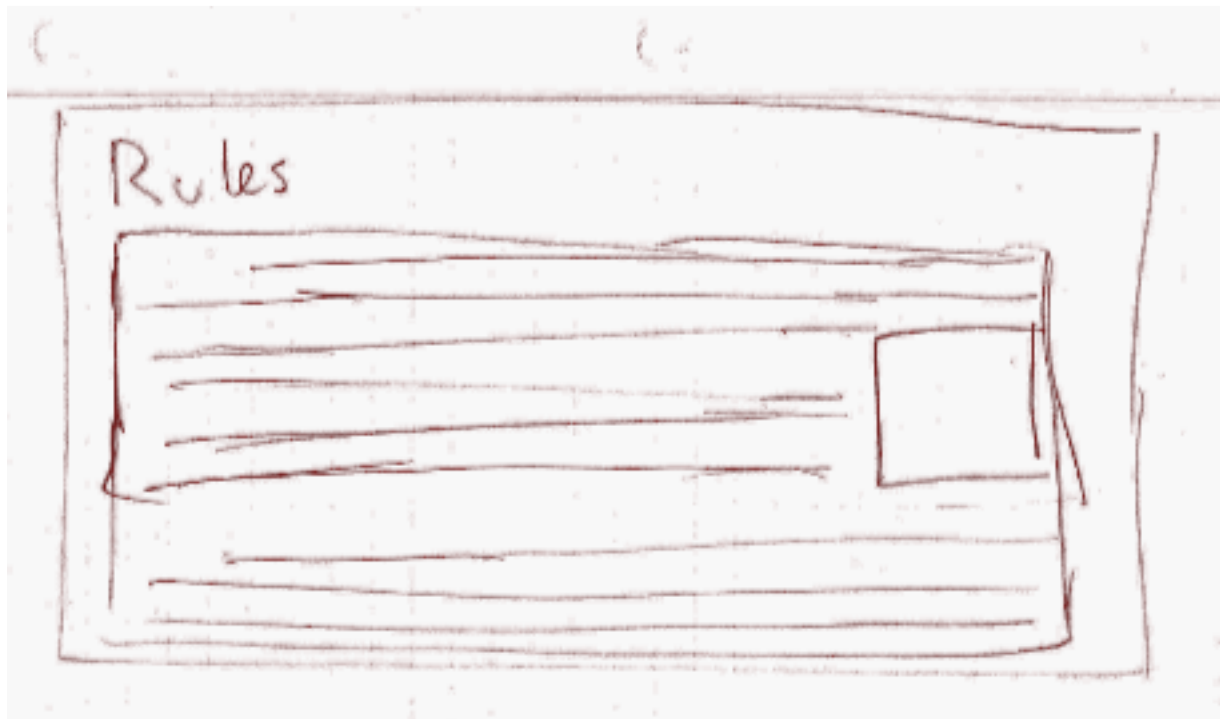
<Join Queue> Goes to the Join Game Page (in Queue)

<Rules> Pops up rules

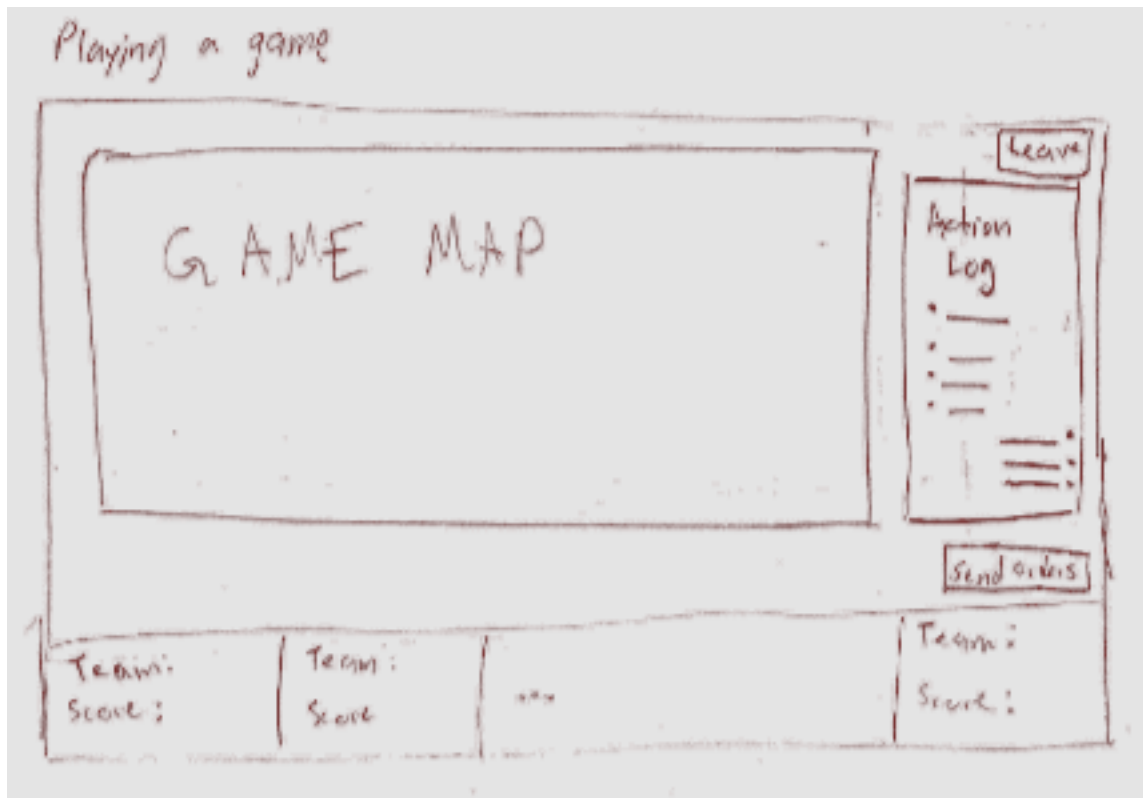
The Join Game Page. The same as above, only it displays that you are in the queue



The Rules page will have paragraphs of text and pictures to help explain the rules of diplomacy



Game page (where the users will play the game)



<Send Orders> will allow the user to confirm sending its moves to the server

<Leave> will allow the user to disconnect from the game

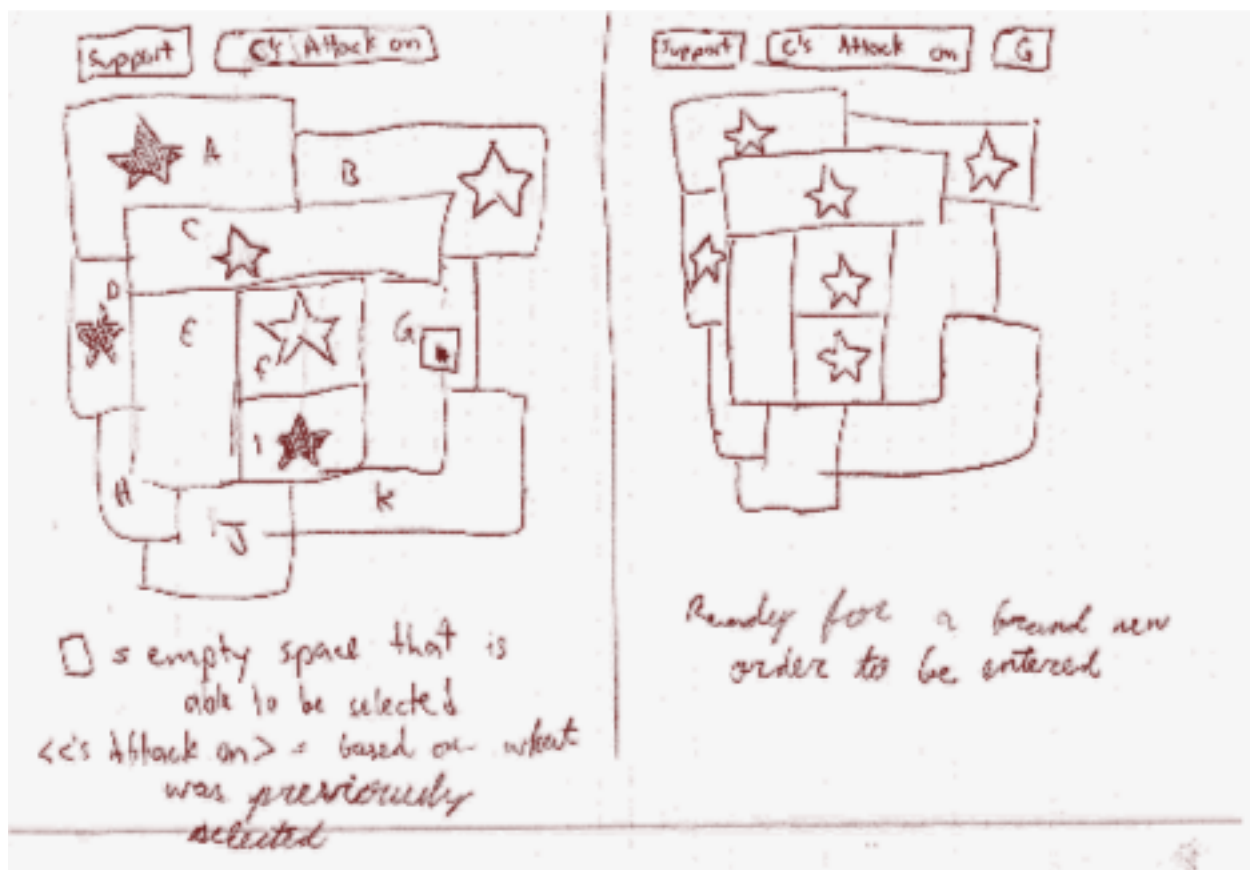
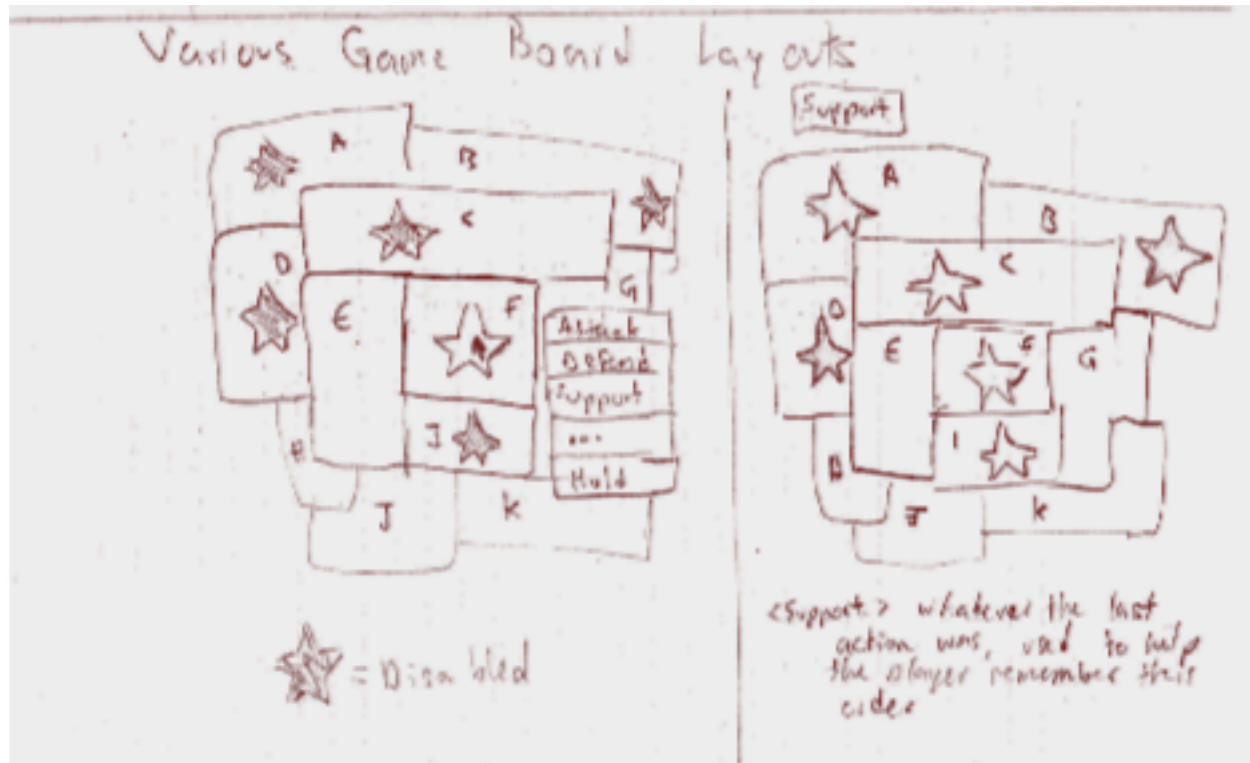
<Action Log> Will list of actions that have occurred in the game.

<Game Map> Will display the map of the game with the pieces in it.

<Team> Will display a team name

<Score> Will display the corresponding team's score

This roughly describes what the game map will look like as a user enters an order



IV. References

1.

MAJESKI, S.

The Rules of Diplomacy

In-text: (Majeski, 2017)

Your Bibliography: Majeski, S. (2017). *The Rules of Diplomacy*. [online]

Faculty.washington.edu. Available at:

<http://faculty.washington.edu/majeski/426/sim1.html> [Accessed 28 Sep. 2017].

2. Example Game Board from <http://www.ultradiplomacy.com/bigmap.gif>

