**Mobile application development design proposal**

By Aleksander Barczak

Matric no. 2497555

**Overview**

Dawning Republic is a single-player and multiplayer space fantasy tactics game with a focus on resource acquisition, management and combat.

The game aims to pitch players and AI against one another trying to achieve dominance over the galaxy, each player starts from their home planetary system and seeks to gain control of others in the galaxy to gather their resources and political sway. Resources will allow being expended to produce ships and facilities, meanwhile political sway will give a player more agency in galaxy wide laws that apply to all players, the passing of which will alter ongoing game rules or provide benefits or drawbacks to all players.

The purpose of the game is to captivate an audience and provide a ground on which users may entertain themselves through puzzles and search for optimal solutions to the problems naturally occurring through play.

Our intended userbase stands to be individuals from their late teens and upwards looking for interesting games who also share interests in science fiction and space exploration.

Play will unfold in rounds of multiple action turns where each player chooses to move their fleets, produce new ships and engage in combat with enemy players. Combat will be designed to be focused on a dice rolling system providing variety and randomness to encounters, technological advancements will be included to support variety in playstyle and create counterplay to other player actions and players will also be provided with several randomly provided “quick actions” which they can use on demand to cause sudden flipping of odds.

Laws and politics in the game will create game to game variety through causing limitations on fleet size, creating demilitarized zones, banning the use of heavy resource excavation equipment, enforcing limits on permitted military sizes, providing all players with some form of technology or outlawing another. The ignoring of laws in the galaxy could be a choice made by the player if they deem it to be too detrimental to them, though going against such a requirement and it being discovered by others could be a way through which you impose sanctions on yourself from all other players and may also draw their attention in terms of military action.

Above all else, Dawning Republic is aiming to be a stimulating experience where no game is the same as any other.

**User Personas**

|  |  |
| --- | --- |
| Name | Nikolas Nielsen |
| Age | 31 |
| Occupation | IT support |
| Background | Enjoys Reading books, socializing with friends, doing jigsaw puzzles and frequenting music events, often commutes for long periods of time to reach work and has quiet evenings |
| Goals | To Kill the time during the commute and make himself entertained as he waits |
| Pain Points | Difficulty running the game, resuming from a previous point or a UI not lending itself to easy interaction |

|  |  |
| --- | --- |
| Name | Cleo Cobb |
| Age | 54 |
| Occupation | Metalworker |
| Background | Wants to spend time with kids however she can, they have an interest in puzzle solving and games and Cleo wants to participate in them |
| Goals | Join game sessions with her family |
| Pain Points | Too high game complexity, too high technical complexity to join multiplayer game |

|  |  |
| --- | --- |
| Name | Azaan Montes |
| Age | 20 |
| Occupation | Retail + Student |
| Background | Azaan frequently plays boardgames with his friends and enjoys long tactical games with plenty of strategies, though his studies and irregular schedule make setting up times and organizing games with his friends difficult |
| Goals | Play and store ongoing sessions with friends |
| Pain Points | Long load times, network connectivity errors, Game balance |

**Minimum Viable Product**

The core features of the application consist of:

* A welcoming menu to let the player decide if they want to:
  + Start a new game
  + Load a previous game
  + Join/Host a game
  + Leave
* A hexagonal galaxy map consisting of planetary systems or other tiles on which the player can:
  + Create ships
  + Build facilities
  + Move Fleets (which also allows taking control of a system)
  + Enter combat
* A combat simulation of two fleets coming against each other
  + A variety of ships for combat including:
    - A Flagship
    - Battleships
    - Cruisers
    - Destroyers
    - Carriers
    - Fighters
  + Ship combat will occur on a small hexagonal tile map of side length three, where the ships have a rock, paper, scissors relationship with each other based on size and speed

**Design Mock-ups**

Map view of main galaxy during navigation phase, annotations include map hazards and their effects, basic view of UI element at the side, the sway and resources available to planets and the fleets of the player and their opponents

A diagram of a game

Description automatically generated

View of combat round UI

A diagram of a game

Description automatically generated

Multiplayer server selection screen providing player with the necessary UI to select a server and begin playing on it.

A screenshot of a computer program

Description automatically generated

User Flow Diagrams

Site Maps

Feature Description

Mobile Design Principles