<div align="center">
Pokemon: East Bay
Software Requirements
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1. Introduction
   1.1. Purpose: Pokemon East Bay will be a massive multiplayer role playing game based on the original Pokemon series but with a twist on the battle system.
   1.2. Scope: Players will be able to travel, catch and trade a wide variety of Pokemon, and battle with other trainers and players. Within the means of the project, functionalities to be implemented are:
      1.2.1. Pokemon for the player to catch
      1.2.2. Non-player Characters for the player to battle against
      1.2.3. A store where the player can purchase items
      1.2.4. A starting town where the user begins their journey
   1.3. Definitions, acronyms
      1.3.1. Pokemon: Monster creatures that can be fought or captured
      1.3.2. Pokedex: A device displaying the player's caught or seen Pokemon
      1.3.3. Pokemon Battle: An in-game duel between the player and either another player or a non-player character where their respective Pokemon fight
      1.3.4. Gym Leader: An in-game boss figure that can be challenged
      1.3.5. Non-Player Character (NPC): Any character found in-game that is not being controlled by a player
   1.4. References
   1.5. Overview:
2. Overall Description
   2.1. Product perspective
   2.2. Product functions
   2.3. User characteristics
      2.3.1. Players
3. Specific Requirements
   3.1. User Requirements
      3.1.1. The user will have access to a login page including the following:
         3.1.1.1. A field to enter the player's username or email
         3.1.1.2. A field to enter the player's password
         3.1.1.3. An option for players to be able to recover either their username or password if forgotten
         3.1.1.4. An option for the user to register through the software as a new player

      3.1.2. Players will have access to an in-game store that will provide them with:
         3.1.2.1. The option to purchase in-game items
         3.1.2.2. The option to sell in-game items

3.1.3. Players will have access to an in-game menu that contains:
- 3.1.3.1. Option to view player's Pokemon team
  - 3.1.3.1.1. The player has the ability to rearrange the order of their Pokemon team.
- 3.1.3.2. Option to view player's Pokedex
  - 3.1.3.2.1. All of the Pokemon owned by the player
  - 3.1.3.2.2. All of the Pokemon seen by the player
  - 3.1.3.2.3. All of the Pokemon not seen by the player
- 3.1.3.3. Option to view player's profile which includes:
  - 3.1.3.3.1. A section displaying the badges the user has earned
  - 3.1.3.3.2. A section displaying total time played
  - 3.1.3.3.3. A section displaying the total amount of Pokemon captured
- 3.1.3.4. View player's items bag
- 3.1.3.5. Save progress option
- 3.1.3.6. Quit game option

3.1.4. The ability to initiate Pokemon battles
- 3.1.4.1. Pokemon battles can be initiated by either running in grassy areas, running into dedicated battle NPCs, or challenging a gym leader
- 3.1.4.2. During Pokemon battles, player have the options to:
  - 3.1.4.2.1. Fight the Pokemon
  - 3.1.4.2.2. Access their bag for items
  - 3.1.4.2.3. Switch Pokemon
  - 3.1.4.2.4. Run from the fight
- 3.1.4.3. Battles will consist of rounds which consist of the following phases
  - 3.1.4.3.1. Each round one participant will be the attacker and other other the defender
  - 3.1.4.3.2. The attacker picks a move for their pokemon to perform. The defender also picks a move for their pokemon to perform.
  - 3.1.4.3.3. The outcome of the chosen moves is resolved.
  - 3.1.4.3.4. Attacker and Defender swap roles.

3.1.5. Client will have Player vs Player battles

3.1.6. The game will have at least have 20 available Pokemon

3.2. System Architecture
- 3.2.1. Player module
- 3.2.2. Client module
- 3.2.3. Server module
- 3.2.4. Pokemon Collection module

3.3. System Requirements

    3.3.1. The system will use a service that handles large volumes of player actions.

    3.3.2. The system will have database for the video game saved data

    3.3.3. The system will have a server to handle chat and Application User Interface(API) functions

    3.3.4. The system be written with the Java programming language, run on the Java Virtual Machine, and make use of the JavaFX library

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5. System Evolution

6. Supporting Info