# Arza – Requirements Backlog

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### **Problem Statement**

There is a high demand for puzzle games on the Google Play app store. We are going to make a clone of the classic puzzle game Puyo Puyo, with our own twist in the form of extra game modes. Because of the game's simplicity, uniqueness, and two player element, we think a game similar to it would be a good fit for the Android platform.

## **Background Information**

There is currently no official version of the original game available in English for Android, let alone any modern hardware. Puyo Puyo has been around a long time, so it was released on many platforms which are now outdated. There are modern versions available, but they are either imperfect, stray too far from the original formula, or are not accessible to a global audience. While there are many puzzle games available for Android, Puyo Puyo fills a niche in the puzzle game genre. It's a two player game where you are going against the clock as well as your opponent. Because the two player element a large selling point, we will embrace it by providing an extensive multiplayer experience.

## Requirements

#### Functional

- Essential
  - As a developer,
    - I need to implement the basic game rules such as block behavior, clearing blocks and sending garbage.
    - I need to generate blocks with randomly assigned colors and make them fall into the playing space automatically.
  - o As a user,
    - I want to be able to move and rotate my pieces using the touch screen.
    - I want a guideline that shows where my piece will land if I swipe down.
    - I want to be able to preview the next piece I am about to receive.
    - I want a summary screen when the match is over with various statistics along with the choice to quit or play again.
    - I want the game to keep track of a score, which increases every time I clear blocks.
    - I want to play with other human opponents.
    - I want to view my opponent's playing area while in a game.
    - I want a game mode that allows me to play by myself and try to obtain a high score.
    - I want a straightforward UI for creating and joining games.
    - I would like a timer on the game interface to see how long the match has been going.

- Non-Essential (if time allows)
  - o As a user,
    - I would like extra game modes that put a twist on the base game.
    - I would like to play against a computer opponent.
    - I would like to automatically find people online to start a game with, using a matchmaking system.
    - I would like to be able to save other players I meet online to a friends list so I can play with them again later.
    - I would like to make an account that saves my statistics and friends list.
    - I would like to compare play statistics with my friends.
    - I would like to share my high score on social media sites such as Facebook.

#### Non-Functional

- Essential
  - As a developer,
    - I want to build a system that is scalable, so it is easy to add extra features in the future.
  - As a user,
    - I want smooth, lag free gameplay and responsive controls.
    - I want the interface to be easy to understand and easy to use.
    - I want my account to be secure.
    - I want a visually appealing backdrop.
    - I want music to play during a game, and have it change according to what's happening in the game.
    - I want visual effects for when I clear blocks.
- Non-Essential (if time allows)
  - As a developer,
    - I would like to optimize game so that it doesn't consume a lot of battery life.
  - As a user,
    - I would like to choose different backgrounds and music.