

## 1. Project Scope:

The scope of this project will be to build an application in python using the Deck of Cards API which will be a matching game.

## 2. Functional Objectives:

### a. High Priority

- i. The Game should be able to pull cards of two of a kind from a card pool, from which the user has to match together
- ii. The user will be able to input which cards they would like to guess to match together
- iii. The user will have at least some visual representation of the cards

### b. Medium Priority

- i. A timer to track speed that will carry over to the next game played to serve as a test of the user's matching ability

### c. Low Priority

- i. The user will have a GUI with the images given by the Deck of Cards API
- ii. The user will be able to pick the size of the matching game they would like to play up to the full deck of cards

## 3. Use Case Descriptions

Use Case Name	Playing standard size game (10 cards, 5 matches)
Basic Flow	<ol style="list-style-type: none"><li>1) User presses button Start Game</li><li>2) Game board is drawn</li><li>3) User starts inputting coordinates ranging from 1,1 to 2,5 to guess if cards are matching</li><li>4) User enters valid coordinate</li><li>5) Game Board is redrawn with the values of the cards at the</li></ol>

	<p>coordinate imputed are shown</p> <p>6) If the cards match, they stay revealed, if they do not match, the game board is redrawn flipping them back over</p> <p>7) Repeat back from step 3 until all cards are matched</p> <p>8) Prompt the user that the game is complete, and have a Play Again button, and a Close Game button</p>
Alternate Flows	<p>Step 4: If the user inputs an invalid coordinate, go back to step 3 after prompting the user to input a correct coordinate</p> <p>Step 8: If the user presses Play Again, go back to step 2 and redraw the game board with a new format of cards.</p>
Preconditions	The program is running
Postconditions	The application returns to step 1
Business Rule	Coordinates imputed must follow the format with two numbers and a space in between them