

Here are the objects and classes we need for our memory game program. This should be all we need to implement a decent, working version. We can always add more features as we think of more ideas.

Object	Purpose
Card	stores useful information about a single card such as the file path to the picture, an audio file (if we want cards to make noises), the name of the card, and a unique id for matching
CardSet	an unordered collection of pairs of cards, which we will use to build decks
Guess	the two places a player chooses to flip cards
Table	a 2D array of squares that will store a randomized layout of a <i>CardSet</i>
Round	represents a round of memory match; it adds instances of <i>Guess</i> to an array, has its own <i>Table</i> , and calculates a score at the end
Account	user account for storing past rounds, stats, and login info
AccountSet	unordered collection of user accounts
LoginPane	before starting, user must login, create an account, or continue as guest (no saved data)
CreateAccountPane	for creating a new account
LeaderboardPane	<i>ListView</i> or <i>TableView</i> of best scores
HomePane	shows buttons to start a round, quit, gamemode, etc. (see picture in spec)
AccountPane	<i>ListView</i> or <i>TableView</i> of rounds associated with an account
RoundPane	visualizes an instance of <i>Round</i> , user can click on cards to make guesses
MemoryMatchGUI	initialize panes and objects; load saved data