Application

• Handle login • Render Welcome and Main Page	• Welcome • Main

Login

• Validates user credentials • Sends user to main page upon successful login	• Application • Welcome

Register

• Inserts new users into database and creates profile • Validates new credentials are correct format and unused • Sends user to login page after successful registration	• Application • Welcome

GamePage

• Display current state of the board • Show selected piece • Send move made to back end	• Main • Match

Main

• Display current and past games from back end • Display current user logged in	• Match • Login

Welcome

- Initial page user sees upon visiting website
- Allows user to go to login or register page
- Displays info about Jungle game and devs

HTTPRestful

• Handle all different request types	• Login • Register • RetrieveMatches • RetrieveProfile

InitServer

• Initialize the server using an HTTPRestful object	• HTTPRestful

JungleBoard

• Create a new board • Initialize the starting pieces • Place pieces • Get piece at certain position • Make moves by updating piece locations	• Piece

Abstract **Piece**	
Rat, Cat, Wolf, Dog, Leopard, BigCat, Lion, Tiger, Elephant	
• Hold information for each piece like rank, color, row and column • Get and set piece positions • Check and return legal moves for each piece • Check if a move will trap the piece • Check if a move will win the game • Set winner and state of game for front end use	• JungleBoard • Child classes

Rat	Piece
• Create Rat pieces • Set Rat rank • Check legal positions as Rat has special moves	• Piece

Cat	Piece
• Create Cat pieces • Set Cat rank	• Piece

Wolf	Piece
• Create Wolf pieces • Set Wolf rank	• Piece

Dog	Piece
• Create Dog pieces • Set Dog rank	• Piece

Leopard	Piece
• Create Leopard pieces • Set Leopard rank	• Piece

BigCat	Piece
	Lion, Tiger
• Check legal moves for Lion and Tiger child classes as they have special moves	• Piece • Lion • Tiger

Lion	BigCat, Piece
• Create Lion pieces • Set Lion rank	• BigCat • Piece

Tiger	BigCat, Piece
• Create Tiger pieces • Set Tiger rank	• BigCat • Piece

Elephant	Piece
• Create Elephant pieces • Set Elephant rank	• Piece

RetrieveMatches

• Communicate with database to pull all active and past matches for a user	• Match • HTTPRestful

RetrieveProfile

• Communicate with database to pull user profiles	• Profile • HTTPRestful

Profile

• Hold information about each user	

Match

• Move data between Jungleboard and Gamepage • Communicate with RetrieveMatches to pull current state of games, save games • Set game state variables	• RetrieveMatches • JungleBoard • Gamepage