

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 register and login requests
 - Start server
 - Creates match objects
- Login
 - Register

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
 - Hold current game state variables for front end communication
- Piece

Abstract <div> Piece Rat, Cat, Wolf, Dog, Leopard, BigCat, Lion, Tiger, Elephant </div>	
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • JungleBoard • Child classes

<div> Rat <div>Piece</div> </div>	
<ul style="list-style-type: none"> • Create Rat pieces • Set Rat rank • Check legal positions as Rat has special moves 	<ul style="list-style-type: none"> • Piece

<div> Cat <div>Piece</div> </div>	
<ul style="list-style-type: none"> • Create Cat pieces • Set Cat rank 	<ul style="list-style-type: none"> • Piece

<div> Wolf <div>Piece</div> </div>	
<ul style="list-style-type: none"> • Create Wolf pieces • Set Wolf rank 	<ul style="list-style-type: none"> • Piece

<div> Dog <div>Piece</div> </div>	
<ul style="list-style-type: none"> • Create Dog pieces • Set Dog rank 	<ul style="list-style-type: none"> • Piece

<div> <div>Leopard</div> <div>Piece</div> </div>	
<ul style="list-style-type: none"> Create Leopard pieces Set Leopard rank 	<ul style="list-style-type: none"> Piece

<div> <div>BigCat</div> <div>Piece Lion, Tiger</div> </div>	
<ul style="list-style-type: none"> Check legal moves for Lion and Tiger child classes as they have special moves 	<ul style="list-style-type: none"> Piece Lion Tiger

<div> <div>Lion</div> <div>BigCat, Piece</div> </div>	
<ul style="list-style-type: none"> Create Lion pieces Set Lion rank 	<ul style="list-style-type: none"> BigCat Piece

<div> <div>Tiger</div> <div>BigCat, Piece</div> </div>	
<ul style="list-style-type: none"> Create Tiger pieces Set Tiger rank 	<ul style="list-style-type: none"> BigCat Piece

<div> <div>Elephant</div> <div>Piece</div> </div>	
<ul style="list-style-type: none"> Create Elephant pieces Set Elephant rank 	<ul style="list-style-type: none"> Piece

RetrieveMatches

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| <ul style="list-style-type: none">• Communicate with database to pull all active and past matches for a user | <ul style="list-style-type: none">• Match |
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RetrieveProfile

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| <ul style="list-style-type: none">• Communicate with database to pull user profiles | <ul style="list-style-type: none">• Profile |
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Profile

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| <ul style="list-style-type: none">• Hold information about each user | |
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Match

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| <ul style="list-style-type: none">• Move data between JungleBoard and GamePage• Communicate with database to pull current state of games• Set game state variables | <ul style="list-style-type: none">• JungleBoard• GamePage• HTTPRestful |
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