

===== Participants

Nave Farjun 312494206 Navefarj@gmail.com

Dan Nechushtan 304990583 Dannech91@gmail.com

URL

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http://localhost:3000/

General

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.Our design model Separates Sever from UI methods*

.Server is responsible for Game Logics, receive data, calculate, and send back data to Users*

The domino images are numbered according to a defined convention that allows the *

."binding" of a domino-tile image file to its model entity

Components

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Game - this is the main class, responsible for the data, logics, Assemble all the other .1
components, and responsible for the flow of the game entities. Manage History, Manage the
.vector of Players

Player - Mainly, holds the Player's Tiles. Named "myTiles". Acts as a stack. (Note: Game .2
has the vector of Players. (and will synchronized between them in a multiplayer game - in
(the future

Tile - represent a Domino Stone. Tile Identified by a unique key, and has a method that .3
.generates the corresponding image file name, to allow binding of a Tile class to its image file

Tile component contains function - which handle onClick event according to the Game
. behaviour

Tile can be found in the Cash, Player's deck - (which are both - stack of Tiles) , or At the .Board

TilesCash - represent Cash itself. Acts as a stack. Main Responsible is giving a random card .4
'to a player, by using the function - 'bringTile

Statistics - responsible for the statistics data for a single player. (Every player has its own .5
statistics built-in in player component)

Board - responsible for the Board. Gets its initial size (9x9) , and responsible for the .6
.resized according to game logics

BaseContainer - The root element . Determines which component/page(log-in ,Rooms, .7
'gameZone) to display, according to the flag named 'showned

'ChatContainer - Container for 'chatInput' and 'conversstionArea.8

.ChatInput - Render chat input, send text to the server.9

LoginModal - The login modal shown in the first page .10

..Rooms - Display the list of room: room's name, creator, Total players etc .11

UserList - Display online players .12

createRoom - Responsible for creating rooms. The data is assembled in a form, by the .13
user, and sent to the server. (in the server - RoomManager is responsible for the request)

statisticsSummary - display statistics of the game - at the end of game, and to all players .14

:UI Notable Functions

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bringTileFromCash() - Considered as a single move of player in the game. invoked by UI .1
onClick. button - "Give me Tile!". Responsible updating the History, choosing free random
,tile from cash

.and updating the current player deck of tiles + score

handleOnClickTable() - Considered as a single move of player in the game. invoked when .2
.a player decide to put specific tile on the board

Gives the Tile the right position, check if Game overed, update history,deck,statistic, and
.other relevant components

:Server

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.Our server is divided into room server('roomManager'), and game server('gameServer')

.Every room creation, leads to a unique game object creation

roomManager - Holds information about all existing rooms, and special functions such as *
,entering the room

...leaving a room etc

gameServer - The game is managed by gameServer. gameServer connects the users in the *
- room

.to their game object

In addition, the gameServer provides a service of functions for playing the Domino game -
such as

dealing with click on dominoes, pulling domino from cash, putting domino stone at
...the board, etc

Assumptions

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The game is a multiplayer game - for exactly 2 or 3 participant .1

Users "authentication" is by name only .2

General Remarks

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We chose to help the user understand what are the legal squares to put the tile in - by .1
.painting -only the valid cells - background in blue

Inside the room, you can see the list of others room's participant. The active player .2
.name will flicker

Each Tiles in the board gets attribute named 'position' which decide whether a tile will be .3
.displayed Horizontal or vertical. Position calculated by Game - when tile placed in Board

:Bonus

(1 =====

Chat - Enables players to communicate