

Screen Sketches

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Team Number : NV_5

Project Name: Color Tetris

Actors and Functionality

Role: Admin

Functionality:

Promote/Demote - assign other users to different roles such as player to admin, player to moderator, or moderator to player

Delete user - give the admin the ability to delete inactive users or those cheating.

View chatlog - give the admin the ability to see chat logs in friend chats to check if users are not using the chat system for illegal purposes.

Role: Moderator

Functionality: Moderator is similar to the Admin but has limited power. Moderator can't delete the user right away. Instead of removing users right away, the moderator sends the list of users who are inactive or illegal. Send delete list to Admin - Send the delete list with reason to Admin so Admin can check it. View chatlog - view the chatlog and add to the delete list. View games - view the multiple games and add the user who is doing inactive or cheating

player: the players would be the main user of this application. The player would have access to singleplayer and multiplayer activities as well as the leader boards. The player would have the ability to sign up for an account and sign in with previously made accounts. The sign in and sign up feature is required for the multiplayer part of the game and the player Id will help them in hosting a game or being found by other users. While both the multiplayer and single-player follows the same set of rule, to puzzle the blocks together based on there shape and color to cancel those blocks, the single-player mode would focus more on the skill of the player himself while multiplayer would be a competition between users. A player can then check their progress via the high score features.

List of Non-Functional Requirements

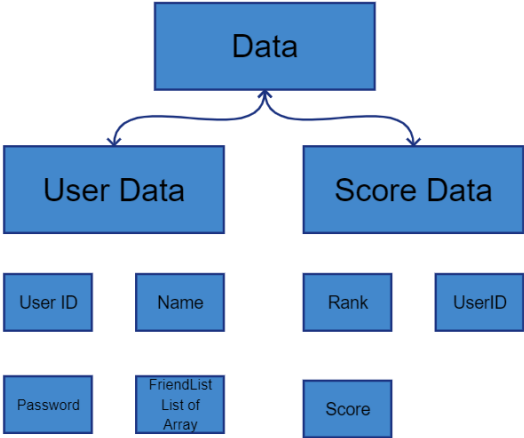
-Performance: we plan for how we design our project to have consistent performance as the number of users should not affect the users interactions

-Scalability: We plan on designing the project such that individual users have a set maximum database storage they can use by setting constant data they will use, and maximum to variable data such as how many friend's they have

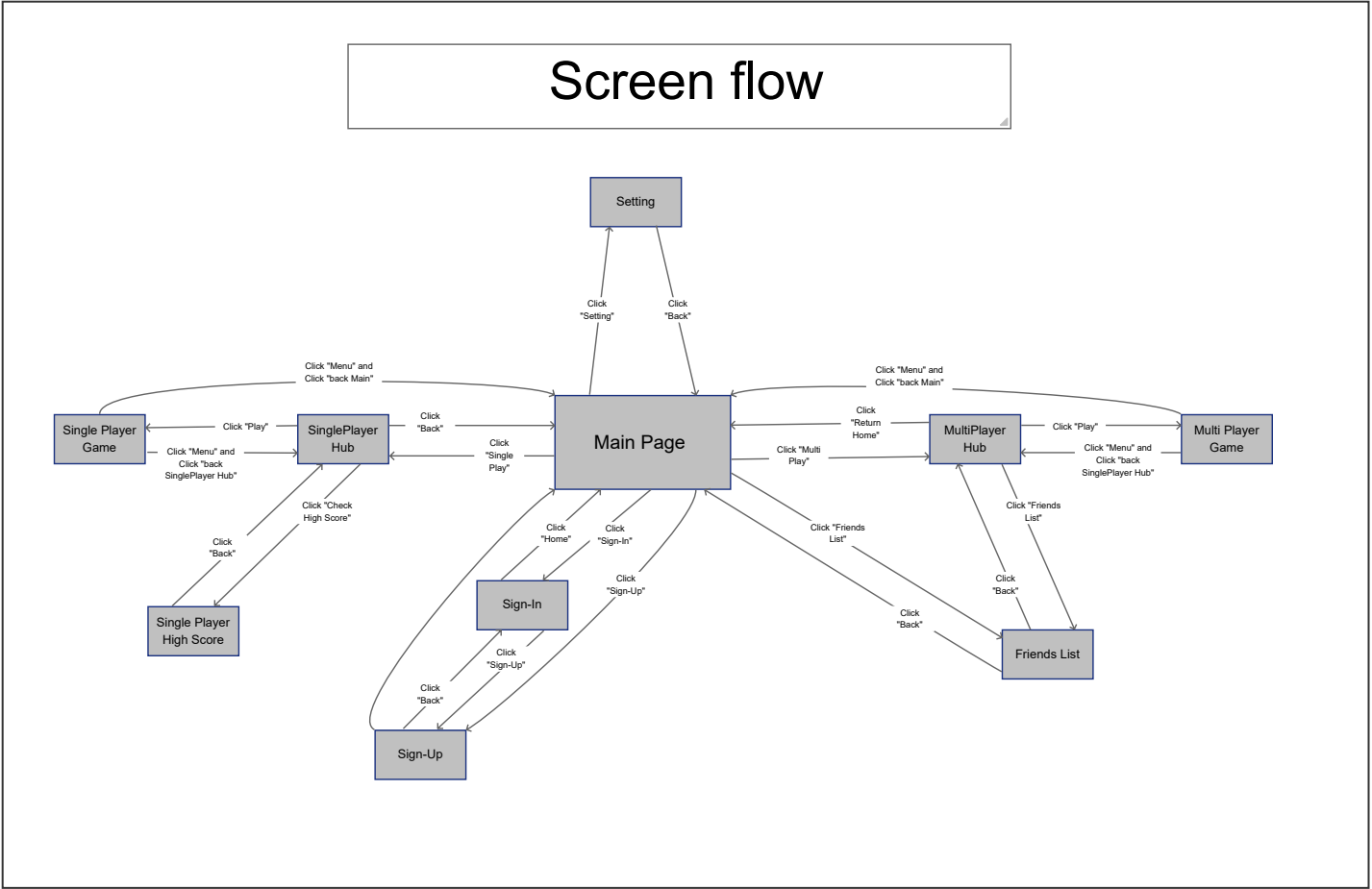
-Maintainability: The design of the project should be at the scale we design it easy to maintain with no overhauls to any design we do.

List tables and fields

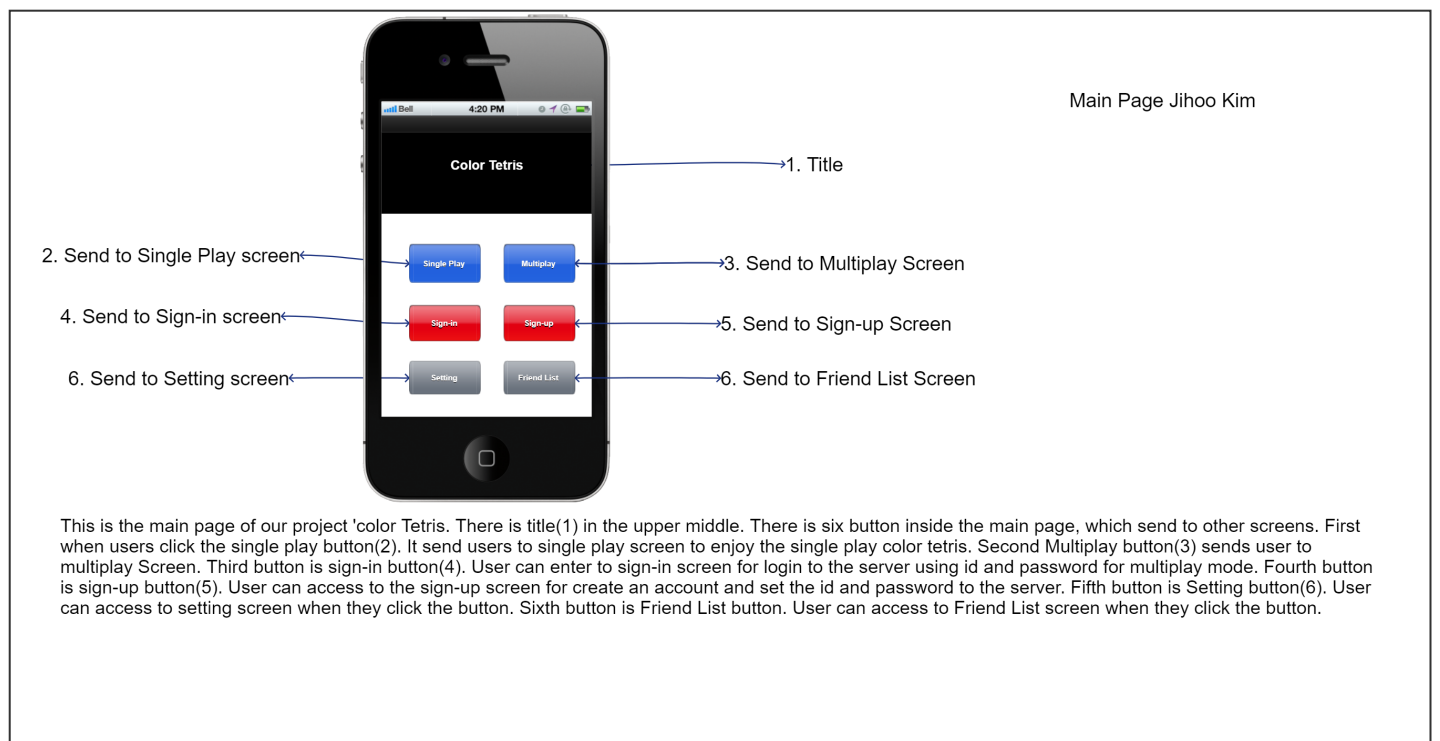
Data Model



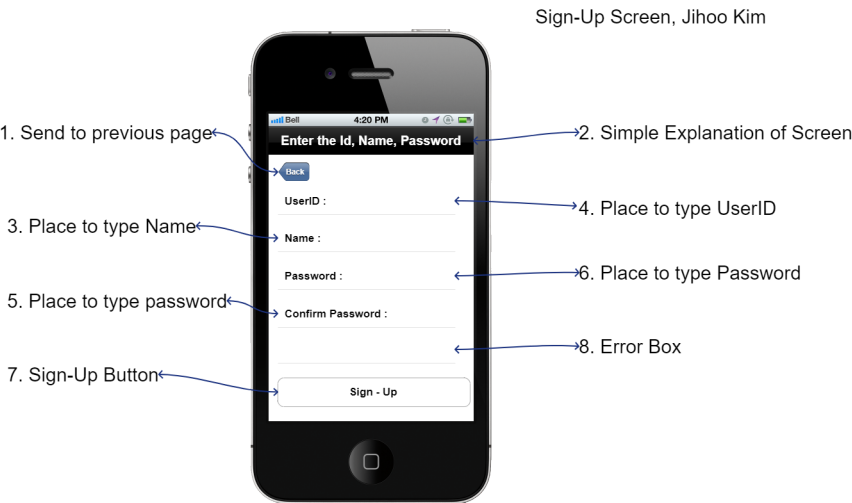
We need two data charts to store all of the necessary information. First, we need to store data about user information. It has userID, name, password, and friendliest. When they sign-up, it will create the data with an empty friend list array. After the user adds the friend, it will add to the friend list array. Second is store the single-player score data so we can track the rank of the scoreThe score will update when there is a player who achieves higher than previously.



Main Page



Sign up page



This is the sign-up screen. The user can press the back button(1) to previous page, which is sign-in page. The black screen, which is placed top of the screen(2), is simple explanation of screen for what user expected to do. There is four line to fill in so user can play multiplayer mode. First part(4) is filling the userID. This userID is necessary for login and adding friend list. The second part(3) is filling the name. This name will appear to the screen when you play the multiplayer game. Third part(6) is filling the password. User need this to login to the server. Last part(5) is filling the confirm password. This will check if the password(6) is same as confirm password(5) and send an error to the error box(8). The next box is the error box(8). This box will appear the error if the UserID(4) or Name(3) is invalid, when we set the condition, or the password(6) is not same as confirm password(5). The last button is sign-up button. User can push this button to sign-up to server when they fill all the box(3,4,5,6).

MultiPlayerHubScreen

1.
Graphic Home
Screen Button

2.
Game Mode
Selection
Buttons

3.
Loading/
Queue
spinner

4.
Home Button

5.
Friends List Button

6.
Play Button that puts
players into the
multiplayer queue,
replaced with a cancel
button once queued

Multiplayer Hub
Joseph Hudson

The Multiplayer Screen is a hub for players seeking to play a multiplayer game. This screen appears when the Multiplayer button in the Home screen is pressed, the friends list is closed when opened from this page, or a multiplayer game is finished and the exit button is pressed.

1. The graphic home button sends the user back to the home screen

2. Game mode buttons let the users select different game modes to play, at least one must be selected before hitting play

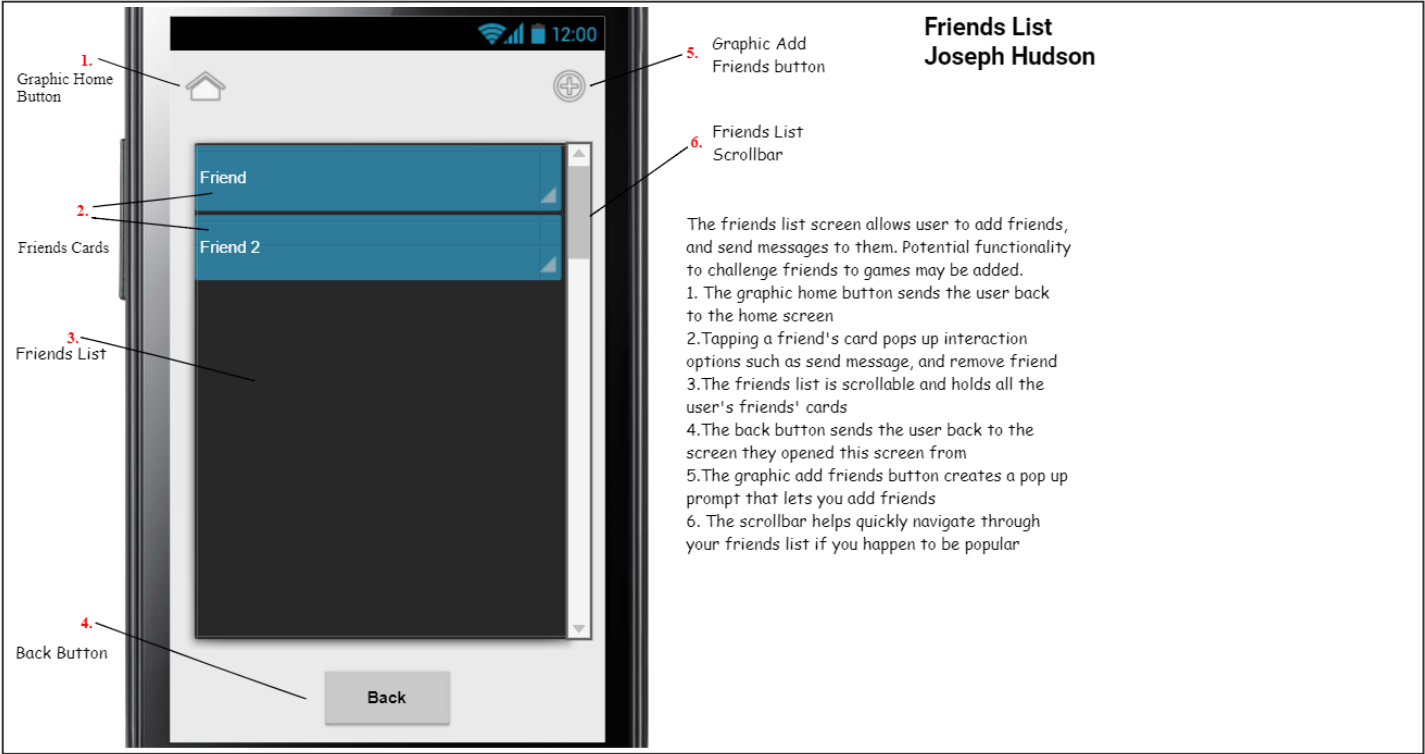
3. The Loading/Queue Spinner pops up once a user successfully queues for multiplayer play

4. The Home button sends the player to the home screen

5. The graphic friend icon sends the user to the friends list

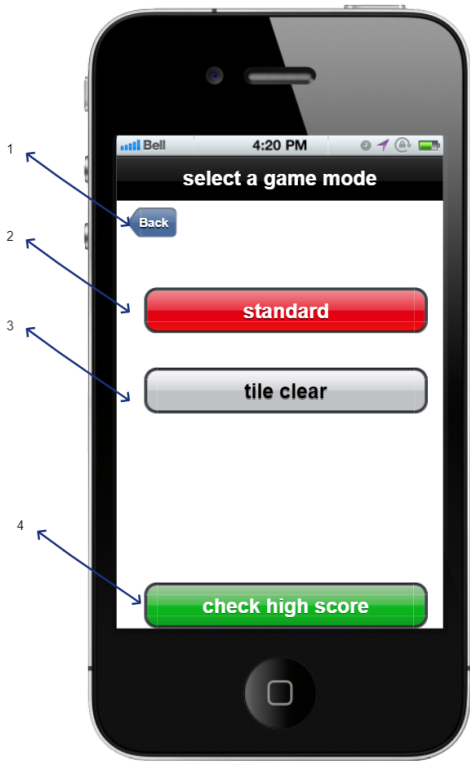
6. The play button queues users for multiplayer play, and is replaced with a cancel button upon queueing

FriendList



Single Player Hub Screen

single player Hub
zian li

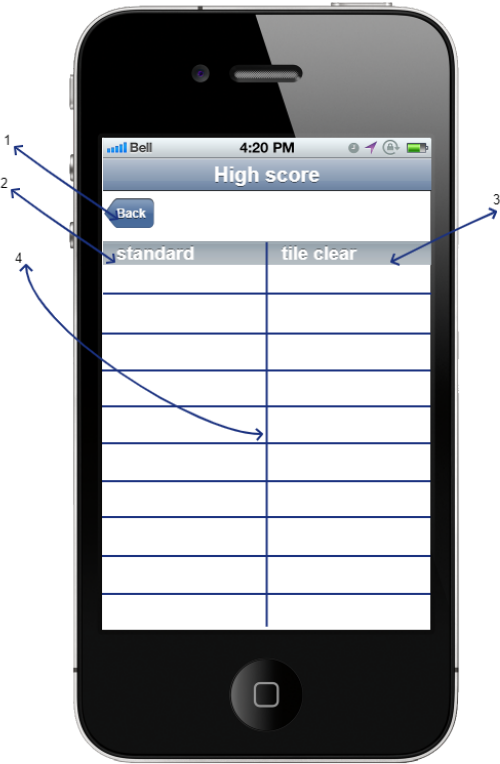


The single player Hub screen is a screen appeared right after the main screen to select a game mode for the single player game. player can also check their high score or go back to the main screen if they changed their mind.

- 1, This is a back button to go back to the main screen
- 2. This is a button to go to the standard game mode.
- 3. This is a button to go to the tile clear game mode. the tile clear mode is tracking the tile cleared as the score.
- 4. This is the button to check single player high score.

Single Player High Score Screen

single player high score screen
zian li

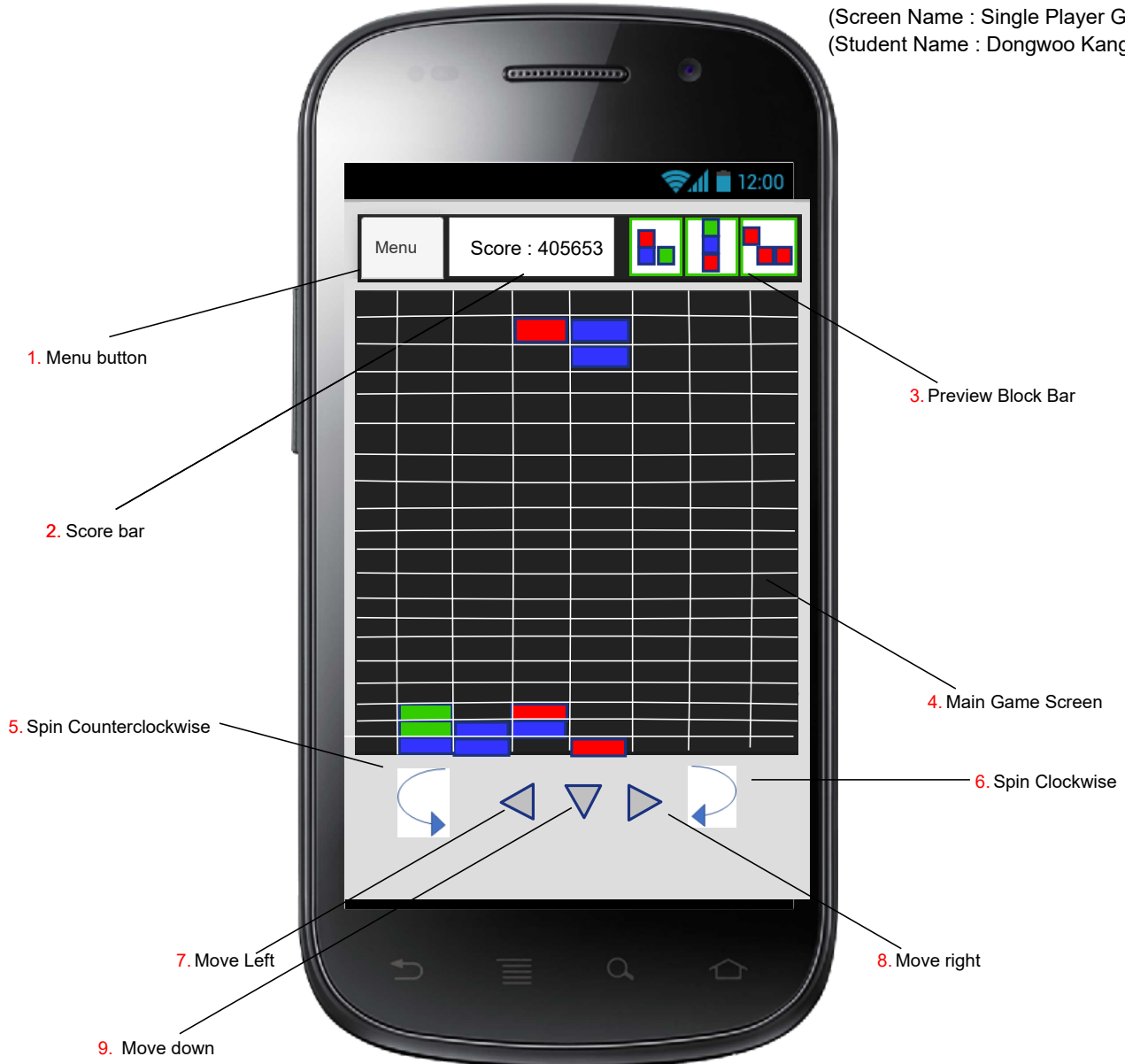


This screen is a high score screen tracking score for the single player game of both game mode. This high score tracking will be tracking and ranking the top 10 score created by the user on this device, the data would not upload to the server.

- 1.This is abutton to go to single player screen.
- 2.This showed the game mode the high score would track, in this case, the standard game mode
- 3.This showed the game mode the high score would track, in this case, the tile clear game mode
- 4.This is the table keeping track of the high score

Single Game Play Screen

(Screen Name : Single Player Game)
(Student Name : Dongwoo Kang)



The Single Player Game screen shows the game to the user. If the user clicks some mode previous screen, Single Player Hub screen, they can play that mode game. If the user wants to get out of the game, click the Menu button and choose whether to go the Single Player Hub Screen or to go the Main screen.

1. Menu button: When the user clicks this button, the user can decide whether to go to the main screen or single game hub page.
2. Score bar: This bar show the score
3. Preview Block bar: This bar shows the next three blocks
4. Main Game Screen: Its width is 8 blocks size and height is 20 blocks size. This box shows the game screen. Only three blocks will come down with random three colors. Besides, there are a total of 6 different kinds of blocks. If there are more five same color blocks, it will pop and the user can get a score
5. Spin Counterclockwise: This button spins the block counterclockwise direction.
6. Spin Clockwise: This button spins the block clockwise direction.
7. Move Left: This button moves the block left.
8. Move right: This button moves the block right.
9. Move down: This button moves the block down.

Setting Screen

(Screen Name : Setting)
(Student Name : Dongwoo Kang)



The setting page is for setting several functions like Sound Effect, Music, Vibration, Change Block Colors. Users can access this setting page from Single Play screen, MultiPlay Hub Screen and Main screen to set up respectively.

1. Sound Effect Button : This button is turn on/off sound effect in this app.
2. Music Button : This button is turn on/off music in this app.
3. Vibration Button : This button is turn on/off vibration in this app.
4. Change Block Colors Button : This button is to change block colors according to the user. Our game set up three colors; red, blue, color. However, if the user wants to change their block color, they can choose three colors at this button. It provide several color at least eights.
5. Go Main Button : This button is to go back main screen.