Group No. 21

Members:

1. Đoàn Ngọc Bảo
2. Lê Trảo Việt Cường
3. Huỳnh Chí Hiếu
4. Dương Tử Huy
5. Đinh Kim Ngân
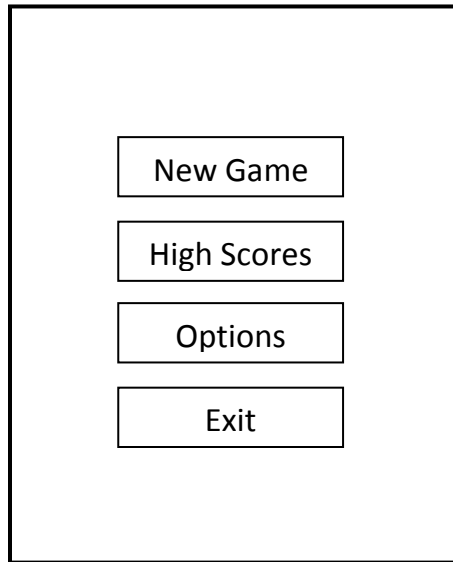
Project: **GAME TERRIS (QT PLATFORM)**

WEEKLY REPORT

1. Feature List

Our project is the game Terris. We will use QT platform to implement it. Our version is based on the rules of the classic Terris that we all know. Specifically, these following features are likely to have:

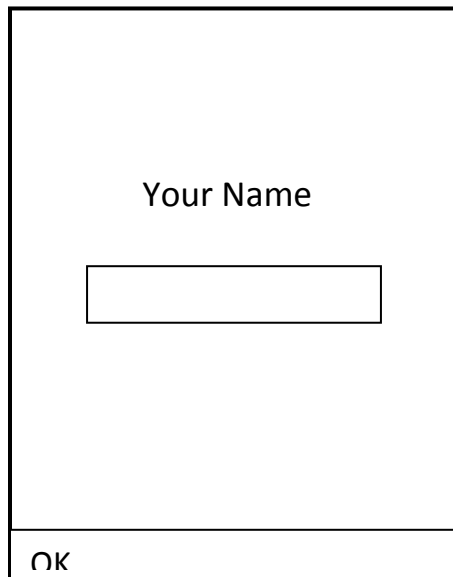| Requirement ID	Description	Priority
REQ_01	Start a new game	High
REQ_02	Allow to choose the difficulty level for the game. There are 3 difficulty levels: Easy, Normal and Hard.	Medium
REQ_03	Allow user to choose whether to save his/her score.	High
REQ_04	Show the list of high scores that are saved before.	Medium
REQ_05	Player can pause/resume the current game.	High
REQ_06	Allow user to configure the game. E.g. Set sound on/off	Medium

2. Mock-up Design

New Game
High Scores
Options
Exit

Home Screen

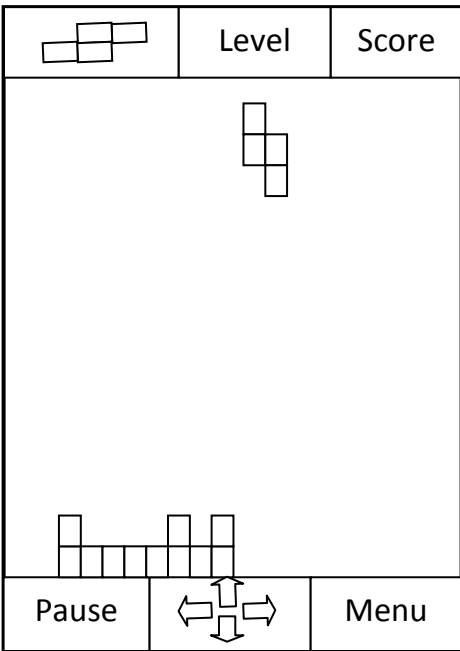This screen shows the options when user starts the game. User can choose to start a new game, view high scores, configure the game or Exit.

Your Name

OK

Input Name Screen

This screen appears to player when he/she starts a new game. It asks player to input his/her name.

	Level	Score

Pause	⇦⇧⇨⇩	Menu

Playing Screen

This is the most important screen. Player plays game here!

Craig	1000000
Huy	500
Bao	500
Ngan	500
Hieu	500

OK

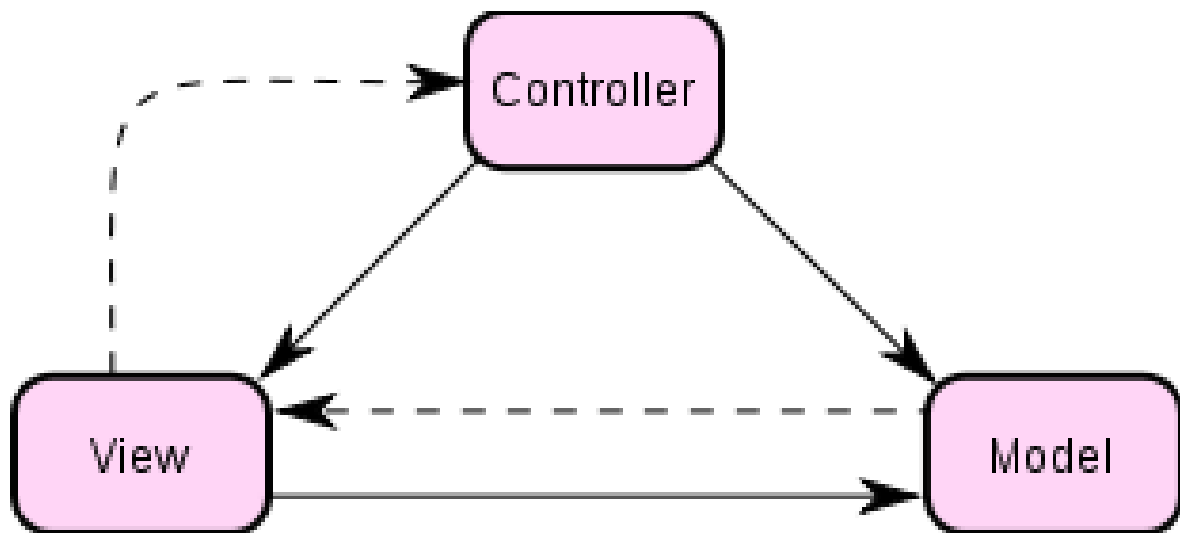**View High Scores Screen**

This screen shows the list of high scores.

Option 1 ☑

Option 2 ☐

Option 3 ☑

OK

View High Scores Screen

This screen shows the list of options that player can configure for his/her convenience.

3. Program design

Controller

View

Model

View
QML files implement the screens of game and accept the events from user.

Controller
Controller handles the events from view and choose the appropriate operation in model to process them.

Controller in our game is Tetris.js file.

Model

Model manipulates the logic of game.

Example:

View raise a click event.

```
Button {
    id: btnShowScore
    anchors.horizontalCenter:
parent.horizontalCenter
    anchors.top: btnStart.bottom
    text: "Show Scores"
    onClicked:{
        btnShowScoreClick();
    }
}
```

```
onStatusChanged: {
            if(status == 2){
                Utils.showHighScore(1)
            }
        }
```

```
function showHighScore(level){
var db = openDatabaseSync("TetrisScores", "1.0", "Local Tetris High
Scores",100);
db.transaction(
    function(tx) {
        tx.executeSql('CREATE TABLE IF NOT EXISTS Scores(name TEXT, score NUMBER,
        level NUMBER)');
        var rs = tx.executeSql('SELECT * FROM Scores WHERE level = "level" ORDER
BY score desc LIMIT 10');
        var r = "\nHIGH SCORES for this grid size\n\n"
        for(var i = 0; i < rs.rows.length; i++){
            r += rs.rows.item(i).name +' got '
            + rs.rows.item(i).score + ' points in '
            + rs.rows.item(i).level + ' \n';
        }
        dialog.show(r);
    }
);
}
```

4. Testing

ID	Owner	Date	Content	Result	Status	Comment
PRO_01	Group 21	10/06	-start game -at home screen, press exit button to exit game	Game is exited	Passed	
PRO_02	Group 21	10/06	-start game -at home screen, press show high score button to display top ten high score -after viewing top ten score, press back button to come back home screen -in home screen, press exit to quit game	Game is exited	passed	
PRO_03	Group 21	10/06	-start game -at home screen, click option button -after that, click back to come home screen and click exit to quit game	Game is quitted	passed	
PRO_04	Group 21	10/06	-start game -at home screen, click new game button -after that, click exit to quit game	Game is quitted	passed	
PRO_05	Group 21	10/06	-start game to go home screen -click option button to configure game -after configuration finished, click back to come back home screen and click new game button. -in playing status, press exit to quit	Game is exited	Passed	
PRO_06	Group 21	10/06	-start game to go home screen -enter view high score status, after that click back to go home screen -at home screen, click option to enter configuring status. After configuration finished, click back -click new game to start play game	Game start with no effect of configuration	Passed	
PRO_07	Group 21	10/06	-start game to go home screen -click new game to enter playing status	Game over	Passed	

			-play game until status is game over			
PRO_08	Group 21	10/06	-start game to go home screen -enter configure mode by clicking option button, after that click ok to go home screen -click new game to enter playing status. -in playing mode, click pause button to pause game, after that, click resume to resume game. -play game until status is game over	-Game is started with effect of configuration -Game over	Passed	
PRO_09	Group 21	10/06	-start game to go home screen -click new game to enter playing mode -after some minutes, click back button to come back home screen -at home screen, click new game button to enter playing mode -after that, click exit button	-After new game button is clicked in second time, new playing mode is created. -After exit, game is exited	Passed	
PRO_10	Group 21	10/06	-start game to go home screen -click new game button and play game until status is game over -after save score with name that is entered from player, click back to go home screen -press high score to view high score After viewing, click back to home screen and click exit to quit	-After click high score, player will player name in high score table if he/she is in top ten player who play the best -Game is exited	Passed	
SYS_11	Group 21	10/06	-start game to go home screen -at home screen, player has phone call	Application is exited	---	Not yet tested
SYS_12	Group 21	10/06	-start game to go home screen -click new game to enter playing mode -click end phone call	Application is exited	---	Not yet tested
SYS_13	Group 21	10/06	-start game to go home screen -click new game to enter playing mode -in playing mode, device loss battery	Application is exited and score not storage into score table	---	Not yet tested

Note: Tetris game which is used for testing is a version 1.1. The best device is Nokia N9. Some another device is available for testing, such as: Nokia N900…