**Group No. 21**

**Members**:

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**Project**: **GAME TERRIS (QT PLATFORM)**

**WEEKLY REPORT**

# 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 |

# Mock-up Design

**Home Screen**

New Game

High Scores

Options

Exit

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 Back

**Input Name Screen**

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

Pause

Menu

Score

Level

**Playing Screen**

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

Craig 1000000

Huy 500

Bao 500

Ngan 500

OK Back Back Back

Hieu 500

**View High Scores Screen**

This screen shows the list of high scores.

Option 1

Option 2

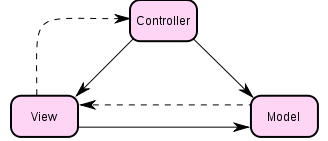
Option 3

OK Back

**View High Scores Screen**

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

# Program design



## 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.

onStatusChanged: {

if(*status* == 2){

*Utils*.showHighScore(1)

}

}

Button {

id: *btnShowScore*

anchors.horizontalCenter: *parent*.horizontalCenter

anchors.top: *btnStart*.bottom

text: "Show Scores"

onClicked:{

*btnShowScoreClick*();

}

}

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*);

}

);

}

# 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  -play game until status is game over | Game over | Passed |  |
| 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…