COMPX202 Assignment8 Documentations

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**Project Name**

Rolling Ball

**Software Methodology**

Iterative and incremental approach

**Backlogs**

|  |  |  |  |
| --- | --- | --- | --- |
| Task ID | Description | Author | ETA |
|  | App Icon Design | H | 2 hrs |
|  | Project Icon & name setting | J | 15 mins |
|  | Three screens setting | J | 15mins |
|  | Define functions in welcome screen | J | 20 mins |
|  | Wireframe design of welcome screen | J | 30 mins |
|  | Define icons & color for welcome screen | H | 15 mins |
|  | Layout the welcome screen with XML | H | 30 mins |
|  | Define functions in game screen | J | 30 mins |
|  | Define obstacles | H | 30 mins |
|  | Define targets | H | 30 mins |
|  | Define ball movement | J | 30 mins |
|  | Define how to calculate score | J | 30 mins |
|  | Wireframe design of game screen | J | 30 mins |
|  | Define icons & color for game screen | H | 15 mins |
|  | Layout the game screen with canvas | H | 1.5 hrs |
|  | Implement ball movement | J | 5 hrs |
|  | Test ball movement | H | 2 hrs |
|  | Implement obstacle effect | J | 5 hrs |
|  | Test obstacle effect | H | 2 hrs |
|  | Implement score system | J | 3 hrs |
|  | Test score system | H | 2 hrs |
|  | Define functions in score screen | J | 15 mins |
|  | Wireframe design of score screen | J | 30 mins |
|  | Define icons & color for score screen | H | 15 mins |
|  | Display pseudo data in score screen | J | 1 hrs |
|  | Use flow in home screen | H | 1 hrs |
|  | Use flow in game screen | J | 3 hrs |
|  | Use flow in score screen | J | 1 hrs |
|  | Test Use flow between screens | H | 2 hrs |
|  | Transfer data from home to game | J | 1 hrs |
|  | Transfer data from game to score | J | 2 hrs |
|  | Display Top 5 in score screen | J | 2 hrs |
|  | Test Top 5 in score screen | H | 1 hrs |
|  | Test the whole game | H | 5 hrs |

**Recordings**

Task 1: Designing an icon

**ETA**: 2hrs, **Actual**: 1h

My inspiration comes from the elastic ball. When it falls, it's very fast. I use the half-moon shape to show the speed when the elastic ball falls. The gray shadow of the ground also reflects the moment when the elastic ball falls. The main color I choose is green. Here are two different design schemes. After thinking, I chose the second logo of our app.



#128A43 #FFFFFF #9E9D9E

Task 2: Project Icon & name setting

**ETA**: 15mins, **Actual**: 5min

This stage not only set the app icon, also changed the app name to rolling ball.

Task 3: Three screens setting

**ETA**: 15mins, **Actual**: 15min

Three activities (welcome, game and score) with corresponding xml files are created and set in the project. Also all three activities inherits from the FullScreenActivity where the full screen display is enabled.

Task 4: Define functions in welcome screen

**ETA**: 20mins, **Actual**: 10min

The welcome screen is also the every first screen when user open the game, thus it must have following functions: 1) game brand identification: telling user what game he is playing. 2) A input allow user to type in his name. 3) A play button to start the game (go to the game screen). 4) A rank button to show user top 5 score ranks (go to the score screen). 5) Copyright info.

Task 5: Wireframe design of welcome screen

**ETA**: 30mins, **Actual**: 15min

According to Task4, the wireframe design of welcome screen is as follows:



Task 6: Define icons & color for welcome screen

**ETA**: 15min, **Actual**: 25min

The colors I define and the choice of icon are based on the design of our logo, green. Icon belongs to the original icon, which is concise and clear to show the function of the button.

#128A43

Task 7: Define functions in game screen

**ETA**: 30min, **Actual**: 50min

According to the sketch above, I made some minor adjustments in the layout. Make the overall welcome interface more concise. The color of logo is in line with our main color.



Release v1.0: Welcome screen is finished

In this version we initialize the project including files, icons, logo, name, etc. Then we design and layout the welcome screen, also we evaluated some task modifications and improvements.

1. Task 2 is added with also setting the app name.
2. Task 3 (setting the three screens) is inserted into before the original Task3 (Define functions in welcome screen), we actually need some initialized tasks before staring.
3. We now only have one main green color from Task 1, we may need more in the following tasks when making game play.

Task 8: Define functions in game screen

**ETA**: 30min, **Actual**: 15min

The game screen is the core screen that user plays game on, which not only needed game play function, but also some interactive functions, details are as follows: 1) A tip message tells user the game is going to start. 2) A cancel button which stops the current game and go back to home screen. 3) A replay button allows user to replay the game. 4) A rank button allows user to go to the score screen. 5) A message in the top showing real-time score. 6) A message box pop up after the game is finished, with the player name and final score. 7) Game play functions will be discussed in the following tasks.

Task 9: Define obstacles & Task 10: Define targets

**ETA**:1h, **Actual**: 1.5hrs

After discussion with the team member, we decided to use rectangle to represent obstacles, green circle to represent target, the game ended when touching obstacles, and increased scores when touching circles. The obstacles indicated in red can move, and the moving track and distance have been identified. Black represents the initial position of the ball.



**References**