

PROJECT DESCRIPTION

When we were assigned to create a final project, nothing crossed the mind of some of us but to create a mini game, some were thinking of doing websites, some are aiming for some softwares. Both of us, Jin Yee and Aida are lucky enough to be paired with each other since we have the same interest and goals in this project which is to create a game. We did a bit of game listing at first and decide it later on. After looking into details of each of the game listed, we finally made a conclusion that the TRexGame would be the most interesting to study and work on. Therefore, our first step was doing our research about it from any possible resources we could get such as Google, Youtube and even asked some questions from one of our parents since he's working in the same field. Here I attach the youtube link that we made as a reference <https://youtu.be/l0HoJHc-63Q> <https://www.youtube.com/watch?v=R11qccSU9wA&list=PLOgQJY7VjpBQhCZDWbucTp8WU8nXkbtUB>. The youtube video was really helpful to us as it helped us a lot in guiding in creating the project. Any how, we also did some improvisation to the project. We added sound effects such as sound effect during the game and the sound effect when it's game over. This is an attachment of the added code which is the sound part.

```
public GameScreen() {
    thread = new Thread( target: this);
    mainCharacter = new MainCharacter();
    mainCharacter.setX(10); //set the initial position of dinosaur in the screen
    mainCharacter.setY(60);
    replayButtonImage = Resource.getResourceImage( path: "data/replay_button.png");
    land = new Land( game: this);
    clouds = new Clouds();
    enemyManager = new EnemyManager(mainCharacter, gameScreen: this);
    imageGameOverText = Resource.getResourceImage( path: "data/gameover_text.png");

    try {
        scoreUpSound = Applet.newAudioClip(new URL( protocol: "file", host: "", file: "data/scoreup.wav"));
        deadSound = Applet.newAudioClip(new URL( protocol: "file", host: "", file: "data/dead.wav"));
    } catch (MalformedURLException e) {
        e.printStackTrace();
    }
}
```

We also changed the method of adding game score. Initially, the game score is added continuously although the game is restart. In our project, we sum up the score as usual but it will be reset to 0 once again if the game is restart.

```
case GAME_OVER_STATE:
    score=0;
    clouds.draw(g);
    land.draw(g);
    mainCharacter.draw(g);
    enemyManager.draw(g);
    g.drawImage(replayButtonImage, x: 283, y: 50, observer: null);
    g.drawImage(imageGameOverText, x: 200, y: 10, observer: null);
    break;
```

The TRex game contain graphics such as the dinosaur, the land, the cactus, the clouds and some texts and symbols. How it is played is the user needs to start the game by pressing on the space from keyboard, the game will eventually start and the user shall press space again to keep on jumping and avoid the obstacles which are the cactus trees. Every jump over the cactus, 20 marks is given. While the jumping is doing, a sound effect is produced. As soon as the user hit or bump into the cactus trees, this is where it is game over for the user. When this happens, a sound effect is also produced. The game will stop and the text "game over" is appeared on the screen as well as the replay symbol. To replay, the user shall proceed with pressing on the space button again and the same process is repeated. When the game is replayed, the mark will be counted starting from 0 again.