

Hosting The Game on Github



What we did:

- Complete the design for T-rex Game on p5 editor
- Create a Github account and upload the code for their game
- Host their game online on GitHub server

How we did it:

Step 1: Create gameState Variables by referring to T-Rex Stage 8 (code.org).

```
1  var PLAY = 1;
2  var END = 0;
3  var gameState = PLAY;
4
5  var trex, trex_running, trex_collided;
6  var ground, invisibleGround, groundImage;
7
8  var cloudsGroup, cloudImage;
9  var obstaclesGroup, obstacle1, obstacle2, obstacle3, obstacle4,
10 obstacle5, obstacle6;
11
12 var score=0;
13 var gameOver, restart;
```

Step 2: Load the gameOver and restart images, create sprites for them and make them invisible; Also, create global variables for gameOver and restart sprites

```

10
11 var score=0;
12
13 var gameOver, restart;
14
15
16 function preload(){
17   trex_running =
loadAnimation("trex1.png", "trex3.png", "trex4.png");
18   trex_collided = loadAnimation("trex_collided.png");
19
20   groundImage = loadImage("ground2.png");
21
22   cloudImage = loadImage("cloud.png");
23
24   obstacle1 = loadImage("obstacle1.png");
25   obstacle2 = loadImage("obstacle2.png");
26   obstacle3 = loadImage("obstacle3.png");
27   obstacle4 = loadImage("obstacle4.png");
28   obstacle5 = loadImage("obstacle5.png");
29   obstacle6 = loadImage("obstacle6.png");
30
31   gameOverImg = loadImage("gameOver.png");
32   restartImg = loadImage("restart.png");
33 }

```

```

35 function setup() {
36   createCanvas(600, 200);
37
38   trex = createSprite(50,180,20,50);
39   trex.addAnimation("running", trex_running);
40   trex.addAnimation("collided", trex_collided);
41   trex.scale = 0.5;
42
43   ground = createSprite(200,180,400,20);
44   ground.addImage("ground",groundImage);
45   ground.x = ground.width /2;
46   ground.velocityX = -(6 + 3*score/100);;
47
48   gameOver = createSprite(300,100);
49   gameOver.addImage(gameOverImg);
50
51   restart = createSprite(300,140);
52   restart.addImage(restartImg);
53
54   gameOver.scale = 0.5;
55   restart.scale = 0.5;
56
57   gameOver.visible = false;
58   restart.visible = false;
59

```

Step 3: Add the behaviour for the game objects in the PLAY state. Change the state of the game when the T-Rex collides with the obstacle.

```

70 background(255);
71 text("Score: "+ score, 500,50);
72
73 if (gameState===PLAY){
74   score = score + Math.round(getFrameRate()/60);
75
76
77   if(keyDown("space")) {
78     trex.velocityY = -10;
79   }
80
81   trex.velocityY = trex.velocityY + 0.8
82
83   if (ground.x < 0){
84     ground.x = ground.width/2;
85   }
86
87   trex.collide(invisibleGround);
88   spawnClouds();
89   spawnObstacles();
90
91   if(obstaclesGroup.isTouching(trex)){
92     gameState = END;
93   }
94 }

```

Step 4: Add the behaviour for the game objects in the END state. Add reset function when the reset icon is pressed.

```

91 if (obstaclesGroup.isTouching(trex)){
92   gameState = END;
93 }
94 }
95 else if (gameState === END) {
96   gameOver.visible = true;
97   restart.visible = true;
98
99   //set velocity of each game object to 0
100  ground.velocityX = 0;
101  trex.velocityY = 0;
102  obstaclesGroup.setVelocityXEach(0);
103  cloudsGroup.setVelocityXEach(0);
104
105  //change the trex animation
106  trex.changeAnimation("collided",trex_collided);
107
108  //set lifetime of the game objects so that they are never
109  destroyed
110  obstaclesGroup.setLifetimeEach(-1);
111  cloudsGroup.setLifetimeEach(-1);
112
113  if(mousePressedOver(restart)) {
114    reset();
115  }

```

```
function reset(){
  gameState = PLAY;

  gameOver.visible = false;
  restart.visible = false;

  obstaclesGroup.destroyEach();
  cloudsGroup.destroyEach();

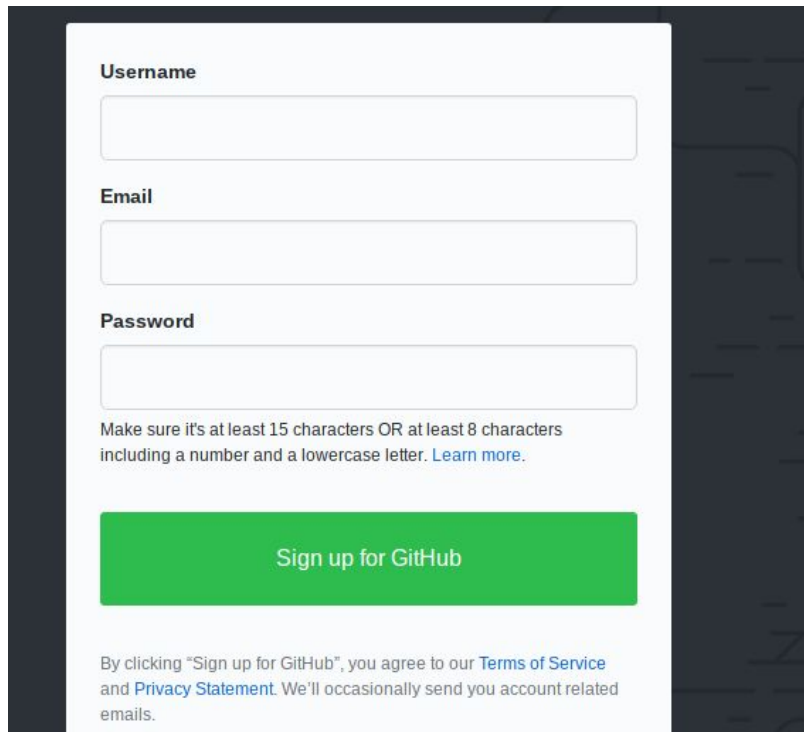
  trex.changeAnimation("running", trex_running);

  score = 0;
}
```

Step 5: Change the ground and obstacle velocity to make the game adaptive.

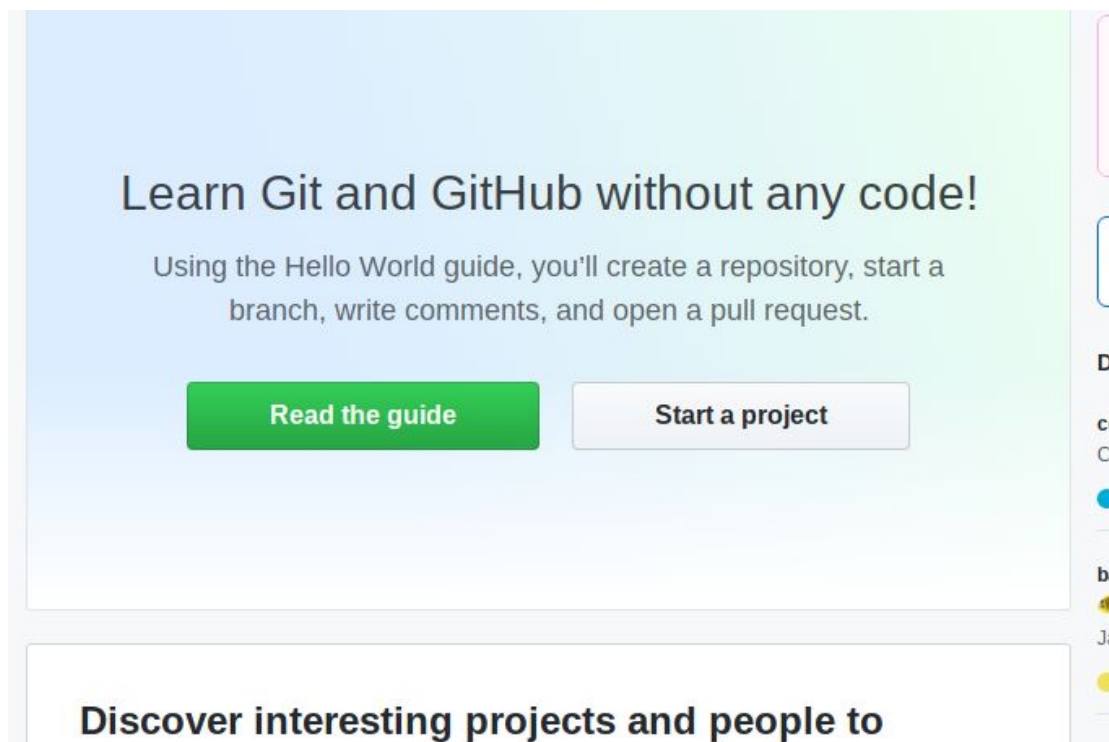
```
35 function setup() {
36   createCanvas(600, 200);
37
38   trex = createSprite(50,180,20,50);
39   trex.addAnimation("running", trex_running);
40   trex.addAnimation("collided", trex_collided);
41   trex.scale = 0.5;
42
43   ground = createSprite(200,180,400,20);
44   ground.addImage("ground",groundImage);
45   ground.x = ground.width /2;
46   ground.velocityX = -(6 + 3*score/100);
47
48   gameOver = createSprite(300,100);
49   gameOver.addImage(gameOverImg);
50
51   restart = createSprite(300,140);
52   restart.addImage(restartImg);
53
54   gameOver.scale = 0.5;
55   restart.scale = 0.5;
56
57   gameOver.visible = false;
58   restart.visible = false;
59 }
```

Step 6: Upload our code on Github, so that we can start making our own portfolio!!
Create a Github account.



The image shows the GitHub sign-up form. It has a white background with a dark grey sidebar on the right. The form contains three input fields: 'Username', 'Email', and 'Password'. Below the 'Password' field, there is a note: 'Make sure it's at least 15 characters OR at least 8 characters including a number and a lowercase letter. [Learn more.](#)'. A large green button labeled 'Sign up for GitHub' is centered below the fields. At the bottom, there is a small text line: 'By clicking "Sign up for GitHub", you agree to our [Terms of Service](#) and [Privacy Statement](#). We'll occasionally send you account related emails.'

Create a new project repository.



The image shows a banner for the 'Hello World' guide on GitHub. The background is a light blue and green gradient. The text reads: 'Learn Git and GitHub without any code!' followed by 'Using the Hello World guide, you'll create a repository, start a branch, write comments, and open a pull request.' Below this text are two buttons: a green 'Read the guide' button and a light grey 'Start a project' button. At the bottom of the banner, it says 'Discover interesting projects and people to'. On the right side, there is a vertical sidebar with a search bar and a list of categories: 'Di', 'co', 'Co', 'bal', 'Jav'.

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository](#).

Owner

 whitehatjr ▾

Repository name *

trex ✓

Great repository names are short and memorable. Need inspiration? How about **super-umbrella**?

Description (optional)

Chrome's trex game created using p5.play

☒ **Public**

Anyone can see this repository. You choose who can commit.

☐ **Private**

You choose who can see and commit to this repository.

Skip this step if you're importing an existing repository.

☒ **Initialize this repository with a README**

This will let you immediately clone the repository to your computer.

Add .gitignore: **None** ▾

Add a license: **None** ▾ ⓘ

Create repository

Download and unzip the project files from p5 editor— **Files> Download**

Chrome's trex game created using p5.play

Edit

[Manage topics](#)

1 commit

1 branch

0 releases

1 contributor

Branch: master ▾


New pull request

Create new file

Upload files

Find File

Clone or download ▾

 whitehatjr Initial commit

Latest commit 1b55a9a now

 README.md

Initial commit

now

 README.md

trex

Chrome's trex game created using p5.play

trex /



Drag files here to add them to your repository

Or [choose your files](#)

Chrome's trex game created using p5.play

[Edit](#)[Manage topics](#)

2 commits 1 branch 0 releases 1 contributor

Branch: master [New pull request](#) [Create new file](#) [Upload files](#) [Find File](#) [Clone or download](#)

whitehatjr Upload files from created using p5 editor Latest commit ff928ed 4 minutes ago

README.md	Initial commit	10 minutes ago
cloud.png	Upload files from created using p5 editor	4 minutes ago
gameOver.png	Upload files from created using p5 editor	4 minutes ago
ground2.png	Upload files from created using p5 editor	4 minutes ago
index.html	Upload files from created using p5 editor	4 minutes ago
obstacle1.png	Upload files from created using p5 editor	4 minutes ago
obstacle2.png	Upload files from created using p5 editor	4 minutes ago
obstacle3.png	Upload files from created using p5 editor	4 minutes ago
obstacle4.png	Upload files from created using p5 editor	4 minutes ago

**Commit changes**

Add files via upload

Add an optional extended description...

- ☒ Commit directly to the `master` branch.
☐ Create a **new branch** for this commit and start a pull request. [Learn more about pull requests.](#)

[Commit changes](#)[Cancel](#)

Go to Settings and activate the GitHub pages.

[whitehatjr / trex](#) [Watch](#) 0 [Star](#) 0 [Fork](#) 0

[Code](#) [Issues](#) 0 [Pull requests](#) 0 [Projects](#) 0 [Wiki](#) [Security](#) [Insights](#) [Settings](#)

Chrome's trex game created using p5.play

[Edit](#)[Manage topics](#)

2 commits 1 branch 0 releases 1 contributor

Branch: master [New pull request](#) [Create new file](#) [Upload files](#) [Find File](#) [Clone or download](#)

whitehatjr Upload files from created using p5 editor Latest commit ff928ed 5 minutes ago

README.md	Initial commit	11 minutes ago
cloud.png	Upload files from created using p5 editor	5 minutes ago
gameOver.png	Upload files from created using p5 editor	5 minutes ago
ground2.png	Upload files from created using p5 editor	5 minutes ago
index.html	Upload files from created using p5 editor	5 minutes ago
obstacle1.png	Upload files from created using p5 editor	5 minutes ago
obstacle2.png	Upload files from created using p5 editor	5 minutes ago
obstacle3.png	Upload files from created using p5 editor	5 minutes ago
obstacle4.png	Upload files from created using p5 editor	5 minutes ago

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

Source

GitHub Pages is currently disabled. Select a source below to enable GitHub Pages for this repository. [Learn more.](#)

None ▾

Select source

master branch

Use the master branch for GitHub Pages.

master branch /docs folder

Use only the /docs folder for GitHub Pages.

✓ None

Disable GitHub Pages.

theme using the master branch. [Learn more.](#)

☐ Make this repository private

GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

Your site is ready to be published at <https://whitehatjr.github.io/trex/>.

Source

Your GitHub Pages site is currently being built from the master branch. [Learn more.](#)

master branch ▾

Theme Chooser

Select a theme to publish your site with a Jekyll theme. [Learn more.](#)

Choose a theme

Custom domain

Custom domains allow you to serve your site from a domain other than whitehatjr.github.io. [Learn more.](#)

You can now share the game link with your family and friends.

Step 7: Before you share the game, fix the jump bugs

```

142
73  function draw() {
74      background(255);
75      text("Score: "+ score, 500,50);
76
77      if (gameState===PLAY){
78          score = score + Math.round(getFrameRate()/60);
79
80
81      if(keyDown("space") && trex.y >= 159) {
82          jumpSound.play();
83          trex.velocityY = -10;
84      }
85
86      trex.velocityY = trex.velocityY + 0.8
87
88      if (ground.x < 0){
89          ground.x = ground.width/2;
90      }
91
92      trex.collide(invisibleGround);
93      spawnClouds();
94      spawnObstacles();
95
96      if (score>0 && score%100 === 0){
97          checkPointSound.play();
98      }
99
100     if(obstaclesGroup.isTouching(trex)){
101         dieSound.play();
102         gameState = END;
103     }
104 }

```



Commit changes

Add jump, dying and checkpoint sounds

Add an optional extended description...

- ☒ Commit directly to the `master` branch.
- ☐ Create a **new branch** for this commit and start a pull request. [Learn more about pull requests.](#)

Commit changes

Cancel

What's next?: Designing Algorithms