

Managing projects with Github

Lee George Gauci - HND in Interactive media Yr2

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Task 1 – (P1.1)

Functionalities:

Jump

When the mouse is clicked the player jumps.

Megajump

When the mouse is clicked and the player is located on a platform the player megajumps

Shrink

When the player collects a power pellet the player shrinks.

Grow

When the player collects a power pellet the player grows.

Speed Up

When the player collects a power pellet the player has increased speed.

Collect Powerups

Through collisions the user can collect power ups.

Collect Score Items

Through collisions the user can collect score items.

Move the player using WASD

When the user presses any of these keys the player moves in the desired direction.

Moving Platforms

There are automatic platforms which are found throughout some levels.

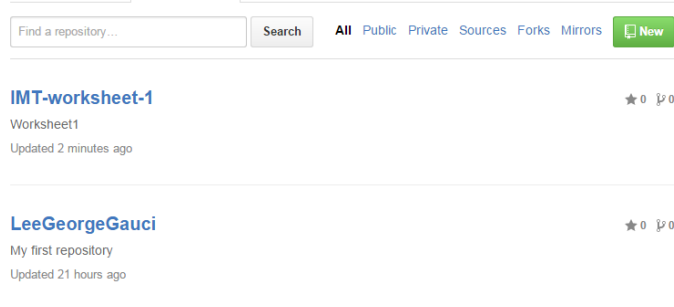
Stop Moving in Air

When the user clicks and the player is in the air the player will not be able to move.

TASK 2 – (P1.2)

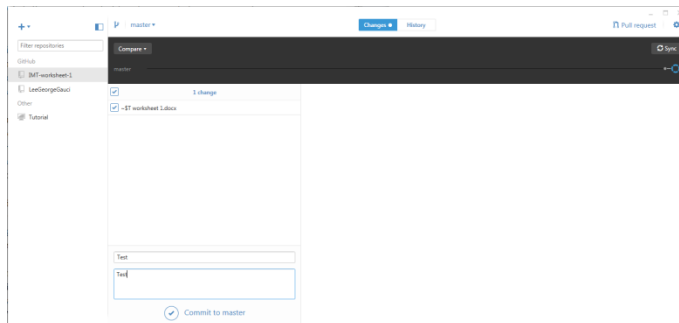
Define and analyse target group to identify user needs by familiarizing yourself with the communication tools available in Github.

Repository

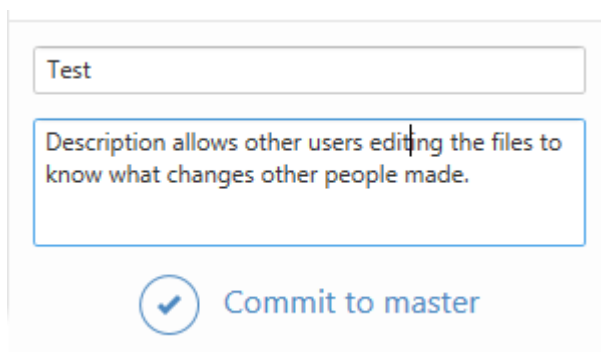


A repository is a directory where storage space is allocated, this allocates space contains all the project files; it also stores each files revision history and can be published both private and public.

Commit



The commit function takes a “screenshot of” each step of your work in the given repository. This allows the user to restore or reevaluate previous versions of your work.



If one or more users are editing the same file, Commit description allows users to add detailed information regarding the changes done by that specific user. This helps organize work and reduce confusion.

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Issue



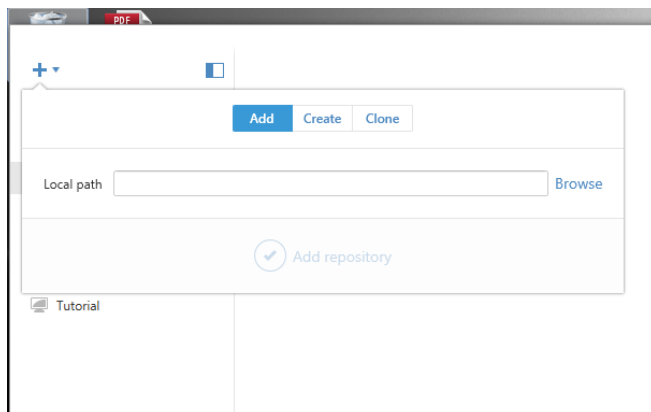
Users can comment problems regarding your code/files found in your GitHub repositories. Issues is a system built in GitHub which organizes those comments in sections and labels better viewing, the master can then tick the comments and resolved.

Sync



When editing files, everything is still done locally I.E your pc. Git Sync allows the user to upload the contents of the repository to the internet which can later be viewed and downloaded.

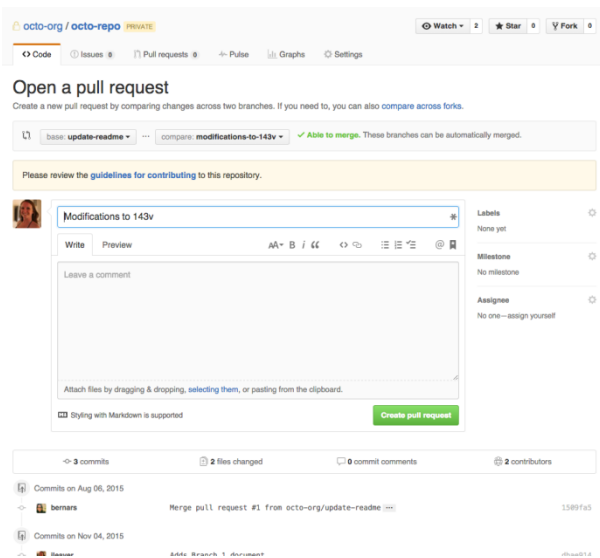
Add



On GitHub desktop, you can add files to your current repository or if the location is not found there is an option to create it as new repository.

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Pull Request



This allows you to notify others about the personal changes you have pushed in the master repository on GitHub. Once the request is sent, interested people can then review and discuss the changes and further discuss potential modifications. They can also push follow-up commits if necessary.

Once you have defined the above, explain which one of the above features would be useful to create a list of requirements as requested by users.

The issue system would be the best way to allow users to submit their requirements as comments and allows them to submit them in a more organized fashion using sections and labels.

TASK 3 – (P1.3)

☒ StoryBoard.pdf

Added StoryBoard to Repository

TASK 3 – (P1.3)

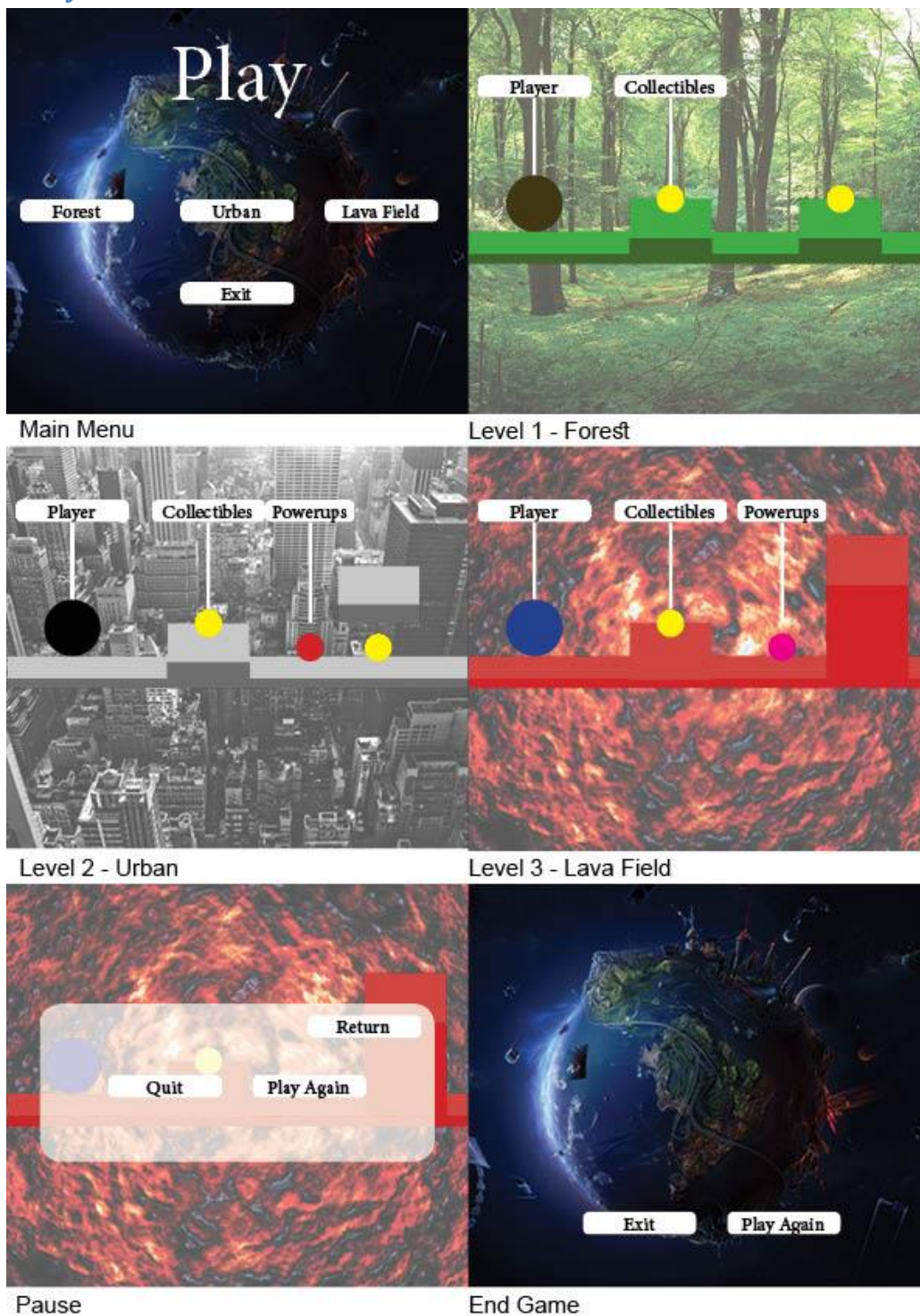


Commit to master

Link to GitHub Commit:

<https://github.com/lggauci/IMTAssignment2016/commit/d6ad3c9a03a6d7b03ba6c6469c7254c78b5d864a>


Story Board



TASK 4 – (P2.1)

Identify and apply own area of expertise by listing the areas of expertise required to implement game Functionalities.

Graphics Artist



Recruiter	Electus Recruitment
Location	Bournemouth
Salary	Negotiable
Posted	24 Mar 2016
Closes	21 Apr 2016
Ref	HQ00011852
Contact	Alex Ronald
Clearance Level	None / Undisclosed
Sector	Engineering, Information Technology
Job Type	Permanent

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Join a fast-growing team of talented engineers within Graphic Development. The successful candidate will be working on supporting our worldwide customer base as a Graphics Artist.

Job Description Graphics Artist

Job description
Creating 3D art assets for real-time simulations within the Graphics Department. Our impressive simulation hardware that comprises of projection domes, large multi-screen displays, HMI touch screens and cyber-chairs will be used to test assets you produce.

Key Responsibilities
The candidate must be motivated, personable and willing to work hard. Strong 3D modelling skills are a must, with an additional mix of animation and 2D abilities. You will need to be well versed in the modelling, UV mapping, and hierarchy tools within 3ds Max software. Other skills such as Particles, Animation and Unity experience would be an advantage. Photoshop skills of a high level are also necessary for texturing and in the production of HMI\ UI assets.

Graphics Artist
Location: Bournemouth
Salary: DOE

Link: https://www.securityclearedjobs.com/job/801797688/graphics-artist/?TrackID=10&utm_source=Indeed&utm_medium=cpc&utm_campaign=Indeed#sc=jobfeed&me=feed&cm=Indeed

Apprentice 3D game Artist



what:

3d Modelling Artist

job title, keywords or company

where:

Newcastle upon Tyne

city or postcode

Find Jobs

Apprentice 3D Games Artist (ITHH)

3AAA - Aspire Achieve Advance - Newcastle upon Tyne
£495 a month - Apprenticeship

Bring the world to life by crafting fluid and responsive in-game animations, as well as compelling cinematic sequences.

Working closely with the other artists and designers you will be responsible for creating high quality assets from vehicles and weapons to characters for Unreal Engine 4. You will be skilled to model and texture quickly and efficiently, with a natural flair for PBR workflows and UE4 implementation. Good knowledge of optimisation is preferred but not essential. A strong portfolio demonstrating the wireframes and texture maps is important when applying for this role.

Responsibilities

- Model everything from characters and environments to vehicles and weapons.
- Create and maintain a texture library.
- Collaborate closely with designers, animators and programmers.
- Organise, plan and manage your workloads for a streamlined pipeline.
- Brainstorm new ideas and continue giving constructive criticism.


Requirements

- Up to date with the latest techniques and tools for generating photoreal but optimised art in an efficient manner.
- A strong knowledge of the following:
 - Zbrush and/or Mudbox
 - 3DsMax and/or Maya
 - Unity and/or Unreal Engine

Link: <http://www.indeed.co.uk/cmp/3aaa---Aspire-Achieve-Advance/jobs/Apprentice-Game-Artist-4051eed0c8d16d3?q=3d+Modelling+Artist>

CGI Artist - Maya Based Generalist - Creative agency London

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CGI Artist - Maya Based Generalist - Creative agency London



Recruiter	Network - Career Consultants
Location	England, London
Salary	£26000 - £30000 per day
Posted	01 Apr 2016
Closes	29 Apr 2016
Ref	AHG-030413
Contact	Anthony Gregson
Contract Types	Permanent
Hours	Full Time
Design Disciplines	Advertising, Digital / Web, Graphics, Other
Job Functions	Designer, Other

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Award-winning creative agency seek to add a 3D Maya generalist to its ever-expanding studio.

The ideal candidate will have a broad knowledge that covers as many aspects of 3D as possible.

Ideally you have experience in rendering in Maya using V Ray and Mental Ray and strong skills and lighting and illumination. You'll also need strong skills in 2D packages such as Photoshop, After Effects and C4D.

Thorough knowledge of the principles of 3D (animation, fx, modelling, texturing, lighting, scripting, shading, rendering and rigging) are essential. In addition to being comfortable with the technical aspects of CG work, you'll also need a good sense of the artistic side

If this sounds like the ideal role for you, please submit your CV with portfolio ASAP.

To receive up-to-the-minute job info, just follow us on at [Twitter.com/networkrecruit](#)

Network is acting as an Employment Agency in relation to this vacancy and is an Equal Opportunities and Age Positive Employer.

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Senior
Interior Designer
6 Month
Fixed Term
Contract
(Maternity Cover)

Up to £50,000
per annum
London

Link : http://jobs.designweek.co.uk/job/446079/cgi-artist-maya-based-generalist-creative-agency-london/?utm_source=Indeed&utm_medium=organic&utm_campaign=Indeed

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Unity Developer

Frontend Software Developer | Santa Monica, CA, United States

Apply

 Send Jobvite

The Stuff You Need:

- 5+ years of experience with C#
- Shipped titles using Unity3D engine
- Experience using version control such as Git
- Strong interest in test driven development
- Mobile development experience
- Experience creating systems using design pattern fundamentals
- Self-motivation with a strong desire to learn and stay abreast of game developments/standards
- Advanced computer science fundamentals in problem solving, object-oriented programming, and data structure

The Stuff You'll Do

- Write super-clean, testable, and reusable code in C#
- Work within Unity to build robust game systems
- Implement systems for the games based on thorough design specifications
- Work with other frontend developers to devise customized solutions to difficult problems
- Be an integral part of a team focused on excellence

[« Back to Current Openings](#)

Link: <http://app.jobvite.com/CompanyJobs/Careers.aspx?k=Job&c=qWC9Vfwm&j=osDt0fwi&s=Indeed>

Job #16495: Developers & Programmers

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Job Code: #16495
Title: Unity 3D Developer
Date Posted: 04/18/2018
Job Location: San Jose California

Job Description:

RE!
Bringing Solutions Th

Take your career to the next level as a **Unity 3D Developer** with Resolvit. We've grown 68% over the last five years and have been included on the Inc. 5000 list of multiple industries.

Are You Up to the Challenge?

Put your Unity 3D expertise and developing skills set to work by innovating original games in a fast-paced environment. As the **Unity 3D Developer** you will have th

What You'll Need to be Successful:

- Strong knowledge of object-oriented design, design patterns, 3D math, linear algebra vector math, and associated data structures
- Expert knowledge of Unity3D and Unreal including GUI, asset bundles, and materials/shaders
- Strong knowledge in 3D graphics development (particle systems and shaders) and performance optimization within game development

Great Additional Skills

- Knowledge of working with Unity on iOS is a plus

What's in it for You?

At Resolvit, you'll be given the support you need to grow in your consulting career. In addition to opportunities for advancement and ongoing training, we offer:

- Medical, dental, and vision insurance
- Life insurance coverage
- Long-term and short-term disability coverage
- 401(k) retirement plan with matching
- Professional support from a dedicated Consultant Care Manager
- Networking opportunities with other consultants in your area

How to Apply:

If you're ready to join our team, click "Apply" to register with our online talent community. Completion of our online registration process will take 5 minutes.

We currently have more than 100 open career opportunities across the country, so be sure to mention the appropriate Job Code with any correspondence!

[Apply to This Job](#)

Powered by Bullhorn

PLU 884

Link: http://cls6.bullhornstaffing.com/JobBoard/Standard/BHContent_JobDetail.cfm?jobPostingID=16495&privateLabelID=8814&originalsource=Indeed.com&CFID=178433549&CFTOKEN=a7cb759d347de4ff-49837AA7-E600-25D7-2C713908770A71AB

What is your favored area of expertise?

I would mostly want to work in the 3d Industry as has been one of my favorite types of art for as long as I can remember, one of the reasons I started my studies. The rewards are great, an expert in 3d design can have a very high pay, can work on many different projects and bring some fun to someone's life using the assets/ characters you created.

TASK 5 - (P2.2)


I would fit in the Game Design as it would allow me to create the actual items used based of the areas discussed in the Idea generation phase. Generally, a team of concept artists would create countless of drawings which I could work off when creating/texturing/animating my 3D models, still I could contribute greatly whilst the idea generation is taking place as my knowledge could prevent some problems that the concept artists wouldn't know about. When done I could send the necessary files to the game developers to implement them in the game. I would also be the "go to guy" as my knowledge on 3d models/ texturing/ animation could help when the functionalities are being implemented. And when 3d objects are not working the way they are supposed to I can help them in solving the problem, as for the actual coding I wouldn't take part. In the end I would be providing support for the game in terms of updates, expansions and DLC's creating new content which could be implemented in the future.

TASK 6 – (P3.1)


Create a new repository

A repository contains all the files for your project, including the revision history.

Owner

 Iggauci

Repository name

LGG TheGame 

Description (optional)

Here I will create a basic 3d RPG Game that will cover climate change as a theme.

☒ Public

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

☐ Private

You choose who can see and commit to this repository.

☒ Initialize this repository with a README

This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

Add .gitignore: None

Add a license: None



Create repository

Here I will create a basic 3d RPG Game that will cover climate change as a theme. — Edit

1 commit

1 branch

0 releases

1 contributor

Branch: master

New pull request


New file


Upload files

Find file


HTTPS

https://github.com/iggauci






Download ZIP


 Iggauci Initial commit

Latest commit 369a047 just now

 README.md

Initial commit

just now

 README.md

LGG-TheGame

Here I will create a basic 3d RPG Game that will cover climate change as a theme.

TASK 7 – (P3.2)

<input type="checkbox"/>	🔔 10 Open ✓ 0 Closed	Author ▾	Labels ▾	Milestones ▾	Assignee ▾	Sort ▾
<input type="checkbox"/>	Stop Moving in Air #10 opened an hour ago by lggauci					🗨 1
<input type="checkbox"/>	Moving Platforms #9 opened an hour ago by lggauci					🗨 1
<input type="checkbox"/>	Collect Score Items #8 opened an hour ago by lggauci					🗨 1
<input type="checkbox"/>	Collect Powerups #7 opened an hour ago by lggauci					🗨 1
<input type="checkbox"/>	Speed Up #6 opened an hour ago by lggauci					🗨 1
<input type="checkbox"/>	Grow #5 opened an hour ago by lggauci					🗨 1
<input type="checkbox"/>	Shrink #4 opened an hour ago by lggauci					🗨 1
<input type="checkbox"/>	Megajump #3 opened an hour ago by lggauci					🗨 1
<input type="checkbox"/>	Jump #2 opened an hour ago by lggauci					🗨 1
<input type="checkbox"/>	Move #1 opened an hour ago by lggauci					🗨 1

TASK 8 – (P3.3)

Megajump platform doesn't seem to work properly. #12

🔔 Open YanikaZerafa opened this issue 12 minutes ago · 1 comment



YanikaZerafa commented 11 minutes ago



After I die and I re-attempt the level, the megajump platform doesn't seem to work and I'm stuck in the same spot. What should I do?



lggauci commented just now



This is a bug that needs to be arranged through unity, I am assuming it has something to do with the collider which is set to trigger, which i think is not big enough. I will play around with it and get back to you !

Sound? #11

 Open YanikaZerafa opened this issue 14 minutes ago · 1 comment



YanikaZerafa commented 14 minutes ago



When I was playing the demo, I realized that there is no sound. Will you implement the sound in the full game? And if so what sound effects will you implement?



Iggauci commented 3 minutes ago

Owner   

Yes there will be several sound effects, some of which would be implemented when the player collect score items and powerups, when the user jumps and when he interacts with other objects. Also background music will be found in each level

I can't move in the air? #13

 Open YanikaZerafa opened this issue 15 days ago · 1 comment



YanikaZerafa commented 15 days ago



Why can't I control the player in the air?



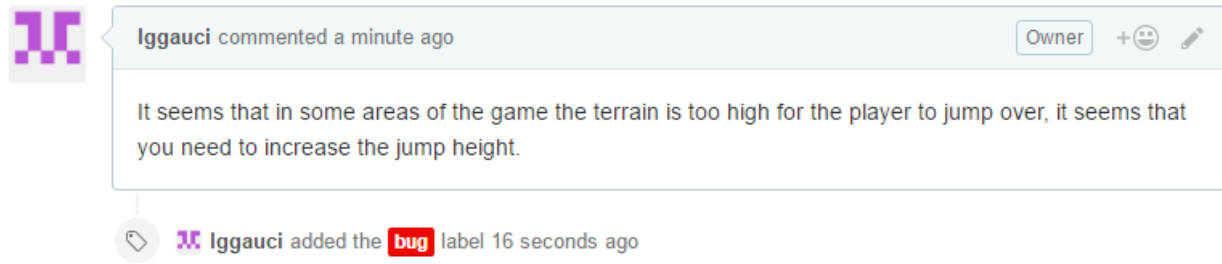
Iggauci commented 14 days ago

Owner   

I implemented that feature willingly as to provide more of a challenge for the user. As it is in essence a platform game the way you control the player must make cansious decisions on how and where he is jumping rather than have him right his mistakes in mid air.

TASK 9 – (P4.1)

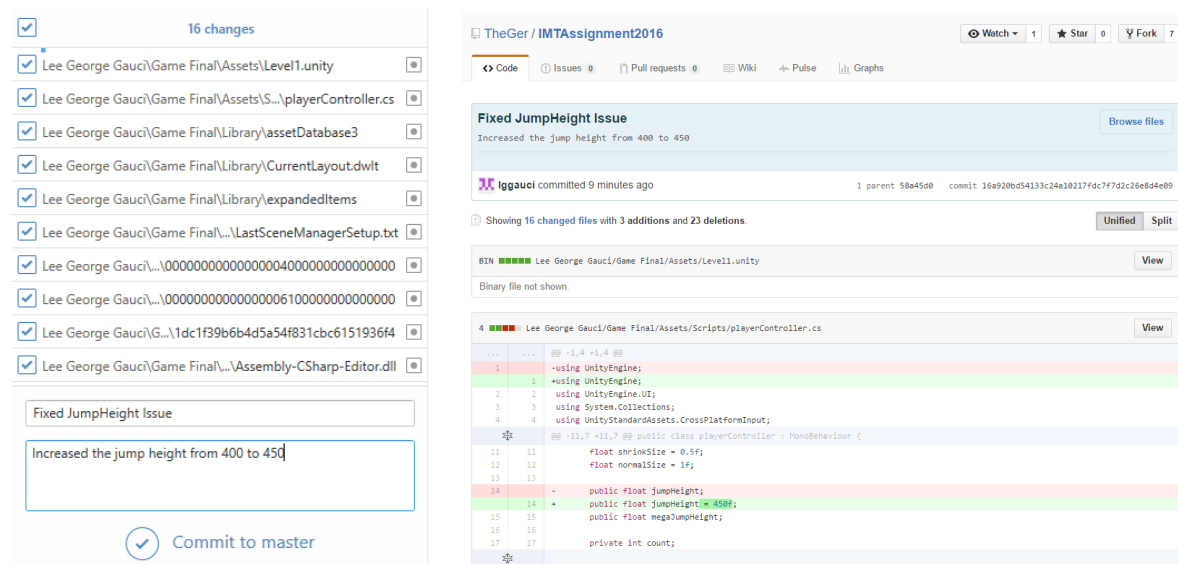
Create an issue, describe in full and apply bug label



Implement Fix in Code



Apply Commit



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Reply to Issue with commit



TASK 10 - (P4.2)

Almost all of the requirements are that the client required are met in the interactive application, some adjustments could be made to further incorporate better mechanics into the game, the powers ups (Shrink, Grow, Speedup), could have certain gateways where they can be activated so that the user would not lose the power up before passing a certain part of the level. Also the wasd work for pc based export, this will not work on tablets so I have also implemented a joystick and a button to move and jump, these can prove to be a little tedious on small screens, so it would be a good idea to export at different aspect ratios depending on the device.

TASK 11 – (M1.1)

What are they?

These are database servers that hold open source code. It is easily accessible by clients across all around the world. These are generally used when creating software development projects between software engineers everywhere. These can be used to create, manage, and tweak any open source software. These database servers provide an invaluable set of tools for today's world where open source software requires regular upgrades and collaboration in development.

Sourceforge vs GitHub vs GitLab

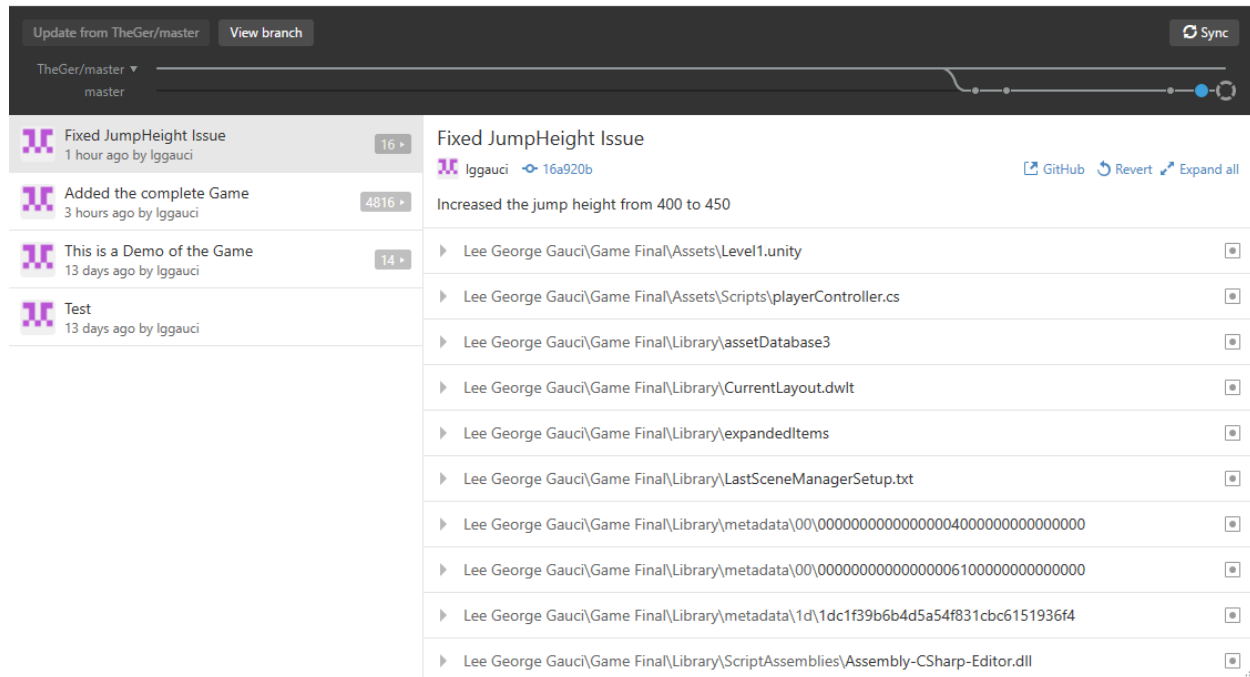
Sourceforge only allows code hosting whereas gitHub provides code hosting and code review. Source forge has a much weaker way of collaborating on projects, in gitHub you can simply fork a project and you can do what you want to it. This can prove to be a little more different in source forge as you have to contact the developer. In the end Source forge has a very bad business model which prevents it from improving, it sets users up with countless ads before they can get what they want in the first place, none of these are found in gitHub which makes for a cleaner and smoother workflow.

On the other hand, gitLab proves to be for user friendly and safe than gitHub. It has a more convenient user Interface which enables users it has access to everything from one screen (stats, groups. Latest users, users, latest projects, and projects) it also has the Snippet support function which lets users share small pieces of code from their project without actually giving the whole project. It has higher protection systems for branches to keep code safe, this way only selected people can push, forcepush and delete code in the selected branch. There is are Improved milestones which enable you to set milestones at a group level not only at a developer level, this helps as developers will see the whole teams project as a whole and not just the work they are limited to. Also there is a work in progress status that developers can use to label their projects. This helps to let collaborators know that the code is still unfinished which in turn prevents accidental merging of nonworking code.

Managing projects with Github

TASK 12 - (M2.1)

Rolling back a commit will allow you to revert the commit you have previously made. This will not remove the commit completely but rather create another commit stating that you have reverted back to the previous state of the repository



In GitHub Desktop you can find the commit you want but navigating the timeline located to the top of the application.



When found you can then click revert which is located to the top right just under the bar.



This created another commit stating that you reverted the previous commit. Now just Sync the commit and you are good to go.

TASK 13 – (M3.1)

Managing Branches

You must know beforehand how you are going to structure your branches to finally be merged to the master. If all developers have commit access to the repository they can simply pull changes from the repository, make their own changes, commit the changes on their local pc and then simply push back into the public repository.

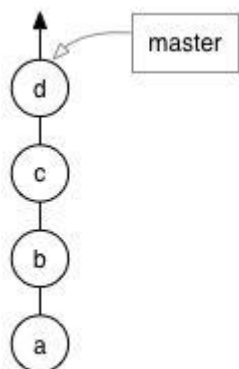
Another method is best suited for one main developer and other sub developers who are applying patches and fixes. The sub developers would clone the repo to their desktop commit the changes locally and then send a pull request to the main developer. A prime example of how this works is how I am managing my project locally and then asking for a pull request from the teacher.

There is also another method which allows you to make specific clones for working on specific parts of the repo. It will use the same method as before where the user would work locally and then post a pull request to the main repo.

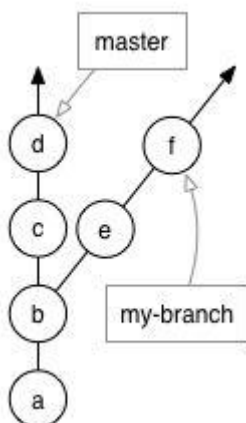
Forking the Initial Project.

When I forked the repository from TheGer I made a complete copy of the repository which is now mine. Any changes I apply whether be it adding files or changing existing ones will only effect my version of the repository this created a branch. Now the whole class has to fork this project creating a branch for each student all of which have their own changes and work locally. After each student makes the pull request TheGer can choose which branches to merge to the master repo with the help of complete details and descriptions of how and what changes were made to the original repo.

TASK 14 – (D1.1)

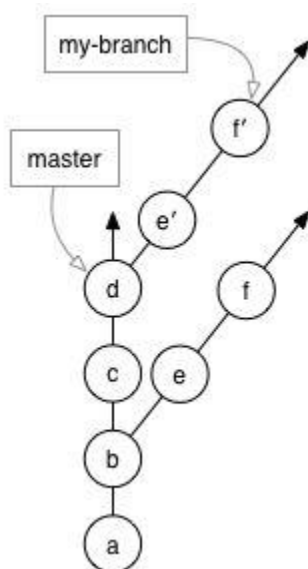


The best way to understand rebasing in Git is to understand how the whole system works. Repository's has a tree structure where the circles are commits applied. In this case there are 4 a,b,c and d respectively. The latest commit (d) is considered to be the head of the master branch.



To the left we see that there is the previous master branch and also my-branch. Both of these branches contain the commits from a and b but when they are separated my-branch gained e and f whilst the master branch gained c and d. As b is connected to both branches it is considered to be the “base” of the workflow.

Now you would think that my-branch is missing important information which is found in c and d so you would like to merge them, this could lead to weird merge commits and make reviewing pull requests much more difficult.



This is where rebasing comes in. Rebasing finds all the commits between the base and the head, in this case e and f and re-commits them on the head of the branch you are rebasing into which in this case is the master. Git creates these as new commits which can be seen as e' and f'. Your previous commits will still be left untouched and if something doesn't go according to plan you can always revert back to the original commits.

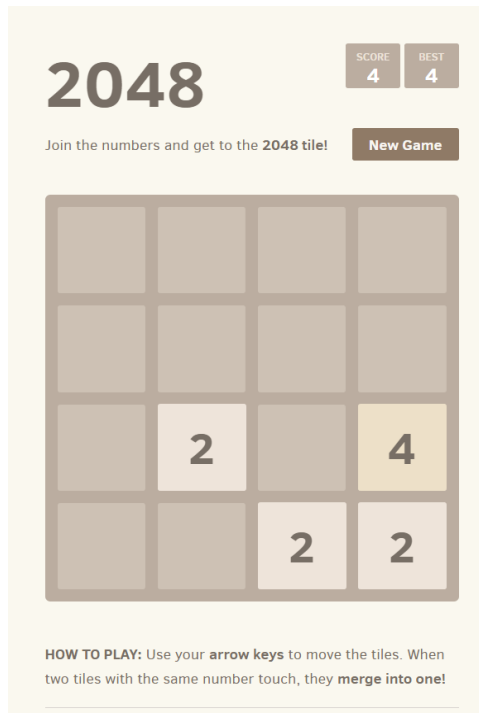
Managing projects with Github

TASK 15 – (D3.1)

Forked Project:

<https://github.com/gabrielecirulli/2048>

Unmodified project:



```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <title>2048</title>

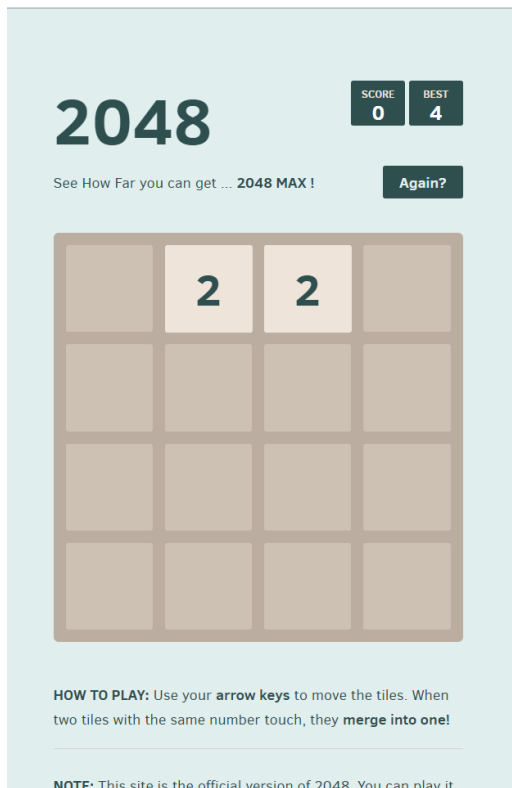
  <link href="style/main.css" rel="stylesheet" type="text/css">
  <link rel="shortcut icon" href="favicon.ico">
  <link rel="apple-touch-icon" href="meta/apple-touch-icon.png">
  <link rel="apple-touch-startup-image" href="meta/apple-touch-startup-image-640x1096.png" media="
  <link rel="apple-touch-startup-image" href="meta/apple-touch-startup-image-640x920.png" media=
  <meta name="apple-mobile-web-app-capable" content="yes">
  <meta name="apple-mobile-web-app-status-bar-style" content="black">

  <meta name="HandheldFriendly" content="True">
  <meta name="MobileOptimized" content="320">
  <meta name="viewport" content="width=device-width, target-densitydpi=160dpi, initial-scale=1.0,
</head>
<body>
  <div class="container">
    <div class="heading">
      <h1 class="title">2048</h1>
      <div class="scores-container">
        <div class="score-container">0</div>
        <div class="best-container">0</div>
      </div>
    </div>

    <div class="above-game">
      <p class="game-intro">Join the numbers and get to the <strong>2048 tile!</strong></p>
      <a class="restart-button">New Game</a>
    </div>

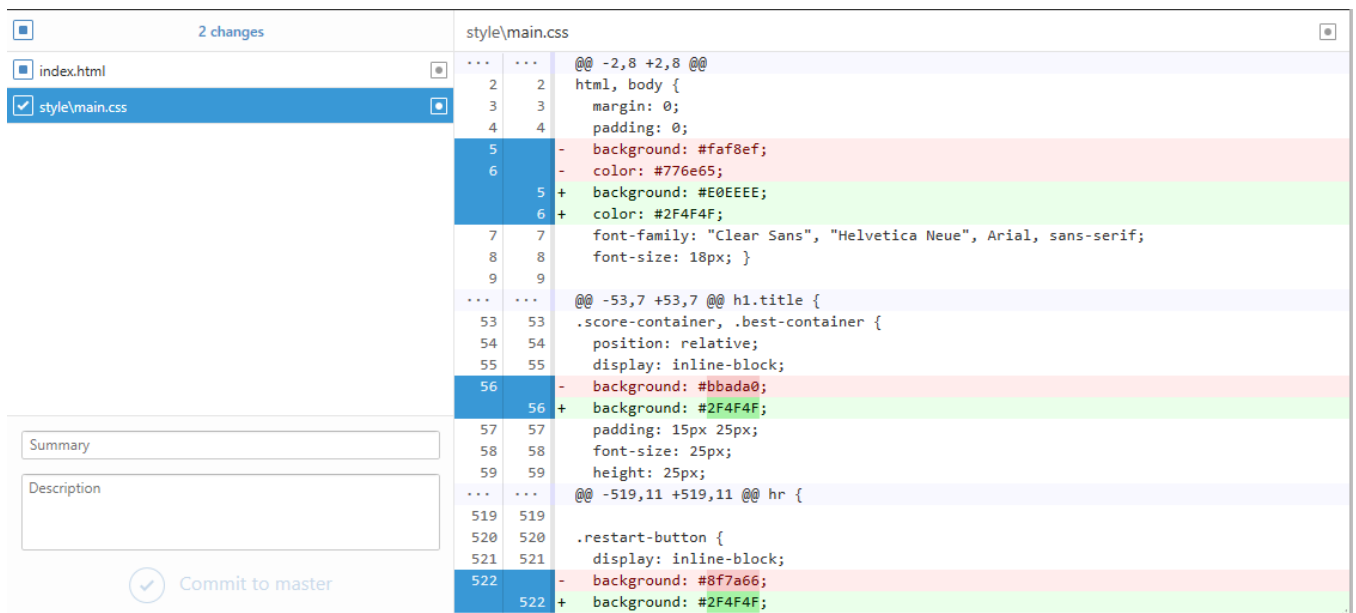
    <div class="game-container">
      <div class="game-message">
        <p></p>
        <div class="lower">
          <a class="keep-playing-button">Keep going</a>
          <a class="retry-button">Try again</a>
        </div>
      </div>
    </div>
  </div>
</body>
</html>
```


Modified project:



I changed the background colour of the buttons and the page itself, I also changed the colour of the text.

I also changed the words located at the top under 2048 from “Join the numbers and get to the 2048 tile” to “See How Far you can get ... 2048 MAX!”



TASK 16 – (D2.1)

The screenshot shows the GitHub interface for the repository 'lggauci / IMTAssignment2016', which is a fork of 'TheGer/IMTAssignment2016'. The repository is currently on the 'master' branch. The commit history is displayed, showing three commits from May 8, 2016, and two from April 25, 2016, plus an initial commit from March 8, 2016. The commits are as follows:

Commit Message	Author	Committed	SHA-1
Revert "Fixed JumpHeight Issue"	lggauci	3 hours ago	324be6d
Fixed JumpHeight Issue	lggauci	4 hours ago	16a920b
Added the complete Game	lggauci	6 hours ago	58a45d0
Commits on Apr 25, 2016			
This is a Demo of the Game	lggauci	13 days ago	16f6ff4
Test	lggauci	14 days ago	8bd002b
Commits on Mar 8, 2016			
Initial commit	TheGer	committed on Mar 8	aa6e7b3

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Bibliography

<http://stackoverflow.com/questions/2715085/rebasing-and-what-does-one-mean-by-rebasing-pushed-commits>

<http://programmers.stackexchange.com/questions/156519/managing-multiple-people-working-on-a-project-with-git>

<https://guides.github.com/activities/hello-world/>