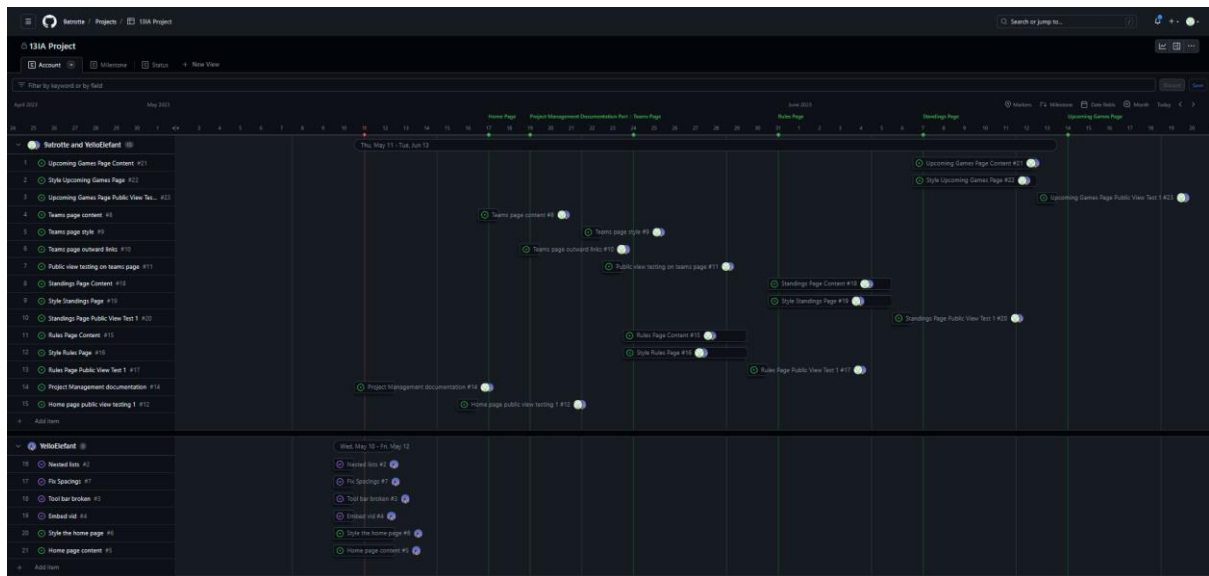


Tools

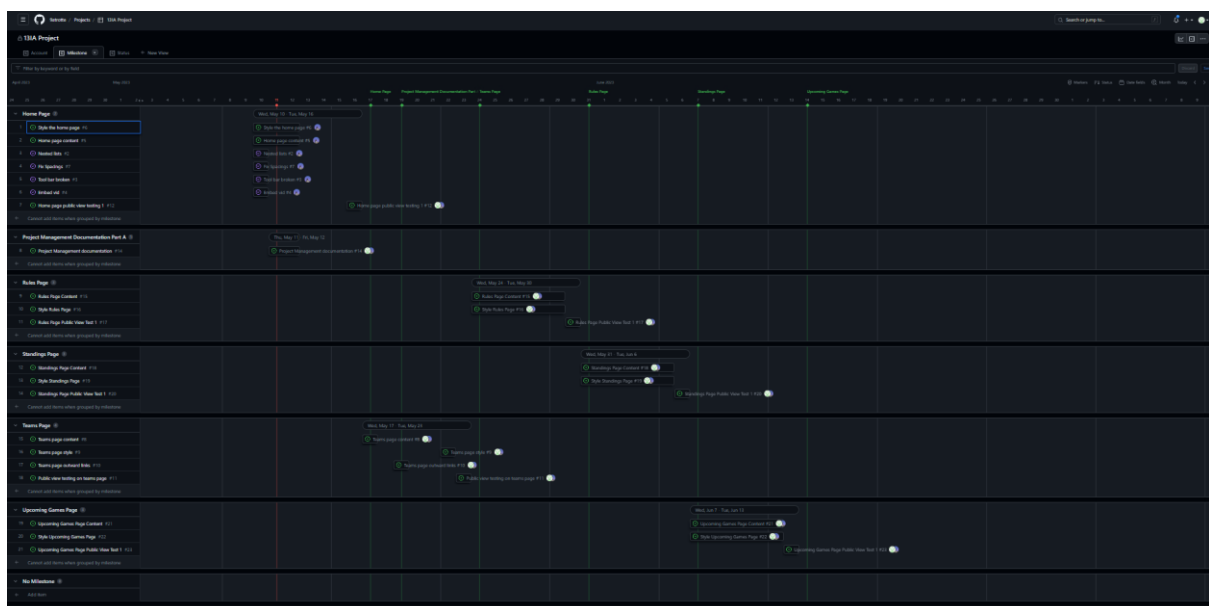
My main tool will be git and GitHub for all management, tracking and contributions. The way I have decided to use the tool and plan to incorporate it into the project will be outlined below.

Main view

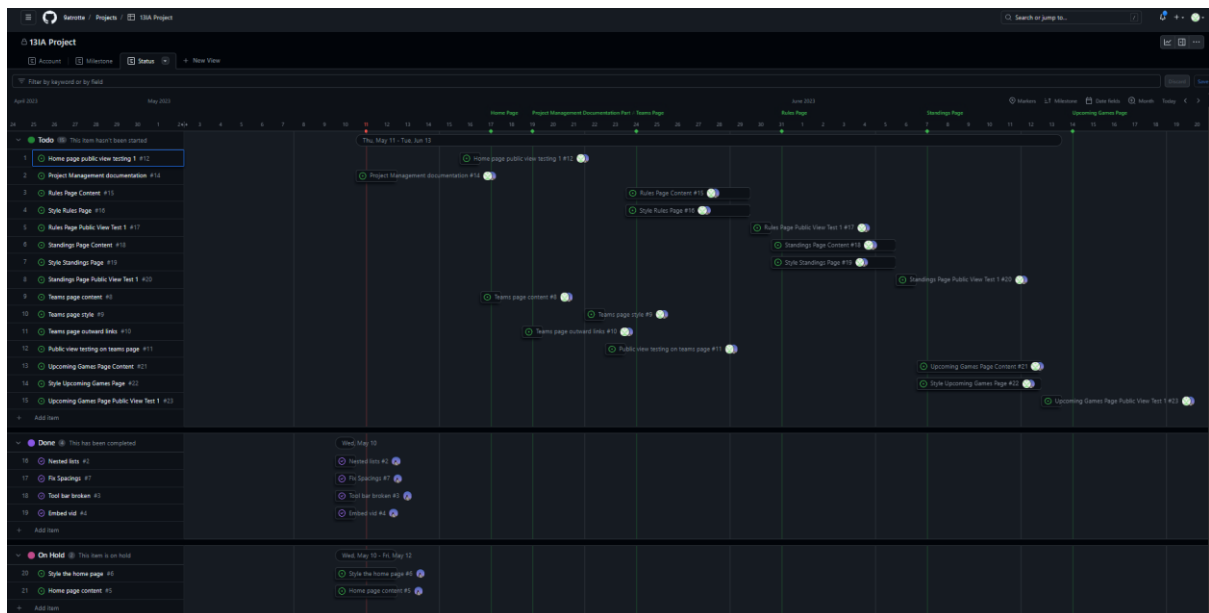
The main way I will see my timeline and see what needs to be done, on hold, being done, in testing, and finished is with the GitHub project which is attached to the repository that is for this project [131A Repo](#). this project view is very in-depth and has a lot to it, most notably is the different views which basically incorporates different ways of seeing the project and allows me to see it in different styles and filters. The project and repo have already been set up and I have been following it so far. For the views I have set up 3



This one is by account more specifically my home account and my school account. This allows me to see what tasks I have set to be done at home and at school or both.



This is set out by [Milestone](#) (this will be explained later) but this will allow me to see what tasks need to be done and when for different stages in the project



The last one is set out by status, basically just tasks that are to do, done, testing, on hold or in progress.

These views allow me to easily see what needs to be done and when but also be able to move things around when needed.

Schedule changes

Schedule changes will happen sometime through the project and will follow a few rules,

1. If a task has been started it cannot be moved in the timeline it may only be extended to show whether I am behind or ahead of schedule.
2. If a tasks end date gets hit but is still not completed it too cannot be moved, only extended to ensure completion, also an announcement will need to be made to document what has happened and why it was not completed to raise any hard tasks that may need more focus or time.
3. Any task that has not started is free to move how it likes but it will need to try to stay within the milestones time frame.
 - a. This will not always be able to happen, but if a task goes on hold and the milestone end date is reached it is acceptable to extend it outside the date, but an announcement will be made, and the milestone will need to be extended.
4. Any change in a task time frame will need to be commented on the task to explain why it has moved and the new projection given.
5. Any tasks that need to be re-opened will be treated as a new task and are allowed to be outside of the milestone time frame, but this will need to be announced and commented on in the task itself.

Progress reviews

Progress reviews will happen every Friday with work mates in class and a stakeholder meeting on Monday this will be set up as a task on the board and will have any feedback commented on the discussions board and on the task itself for redundancy and ease of use.

Tool

Timeline

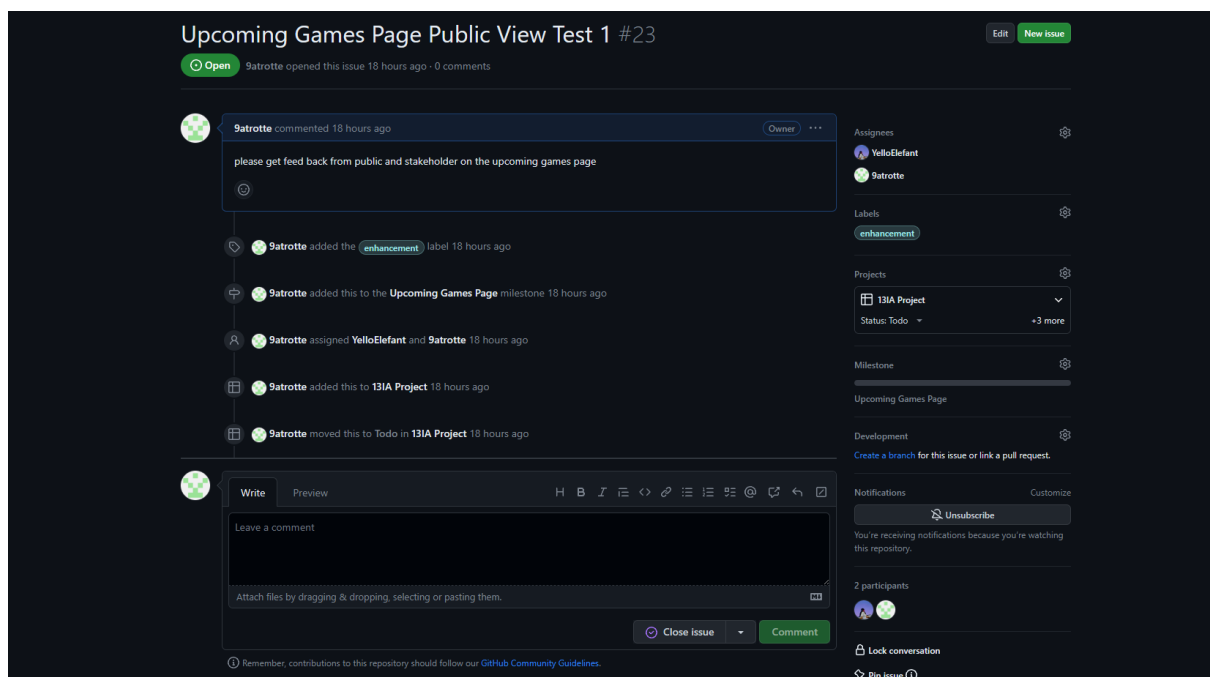
My "week"

My work week will be measured in a Wednesday-to-Wednesday style. As I have weekly meetings with my stakeholder on Wednesday and milestones will need to be completed before each meeting

Each milestone/task will start on the Wednesday and end on the next Tuesday as this will ensure that the task/tasks are completed before the meeting but the morning of the meet can be used to fix any little tasks that need to be done before the meeting, these will be labelled with the important tag to show that they are needed to be rushed before the meeting. Most tasks and milestones will revolve around the weekly meeting with my stakeholder.

How tasks get made

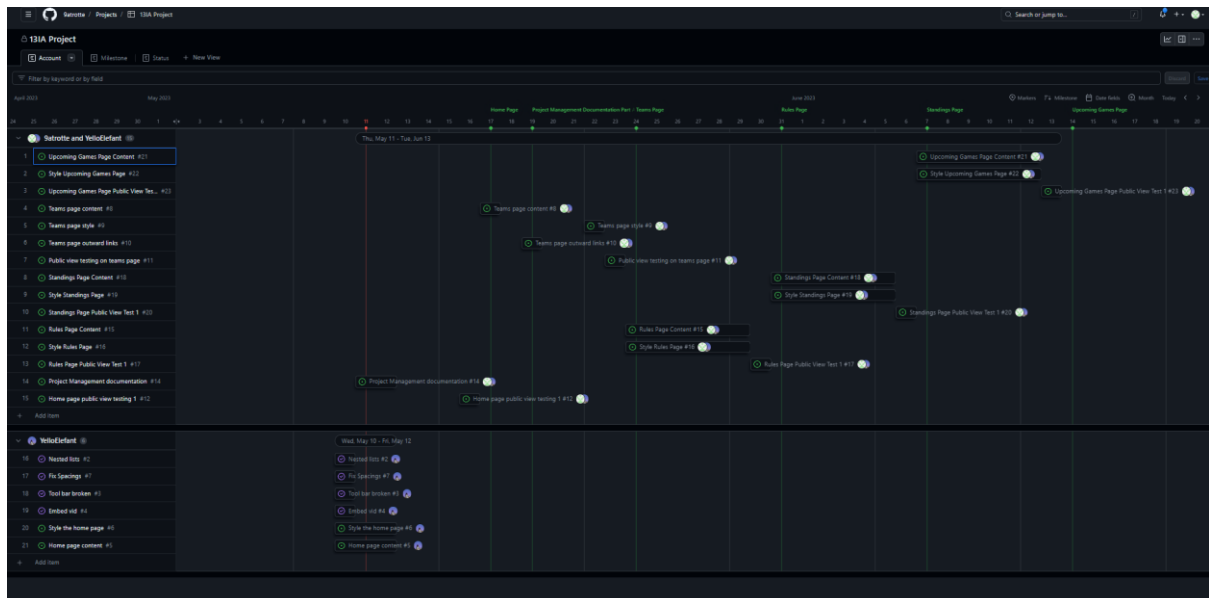
All tasks will be made as a GitHub issue on the repository, like so...



This will automatically go into the project board and organize itself as such. Each issue will have a title (brief meaning to what it's for) and a top comment of a more descriptive meaning of what needs to be done and by when. Each issue will be tagged with a [label](#) (this will be explained later) and assigned a milestone, if a milestone is not available for the task it can be labelled as headless as a one off task or a milestone can be made for the new set of tasks and will need to be made as I have set out. If a task is to have code made or changed for it to be completed a branch can be made in accordance with [Branches](#), this will help when I look back at tasks and I can see exactly how it was completed and what changes were made to the project as a result. Time frames for tasks can be put on when the task is made if it feels necessary to.

Work/Home tasks

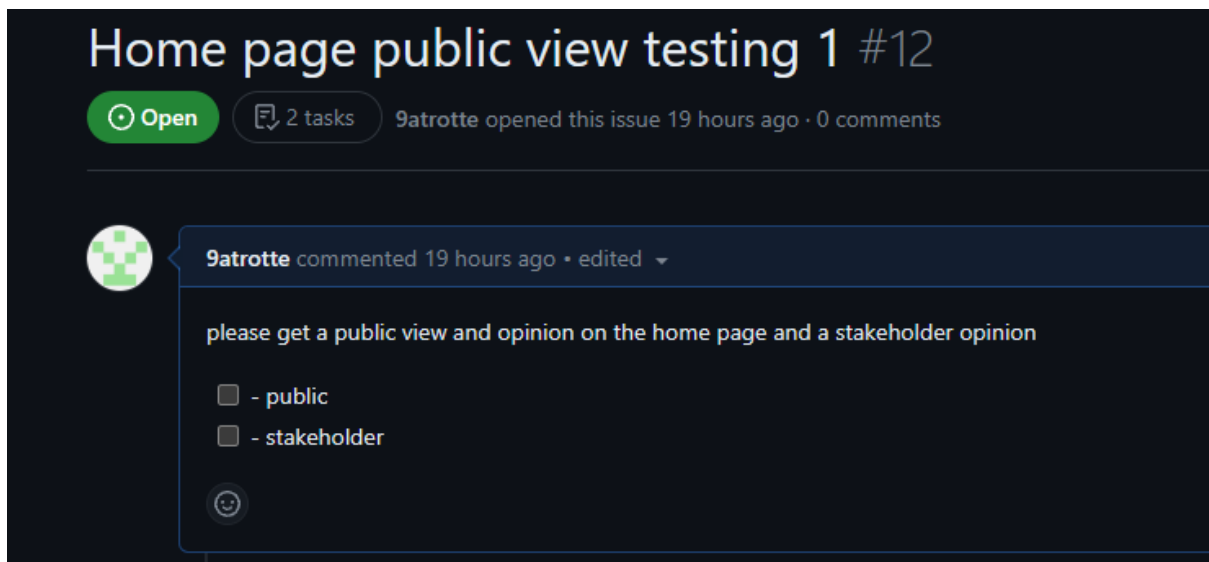
To manage what tasks will be done at school or at home will be simple, i will assign my home account or my school account or both to the task and that will be reflected in the project board.



This shows what tasks are to be done by my home account, school account or both accounts. Any task can be put on whatever account, but it will be prioritized to be on my school account.

Testing

All tasks will be required to have a testing time allocated; this can be a task within the issue.



This means that this task has 2 parts to be completed 1 of which can be a test box to show that the task will need to be tested. This will need to be a test of functionality and of outside opinion, this can be just a colleague or could be the stakeholder.

Push backs

Push backs are bound to happen and as such these rules will need to be followed...

1. The push back will need to be announced in the discussions page.
2. A reason will need to be given.
3. New end date and projection will need to be given.
4. If these rules are not met the push back cannot happen and the task will need to be looked at later

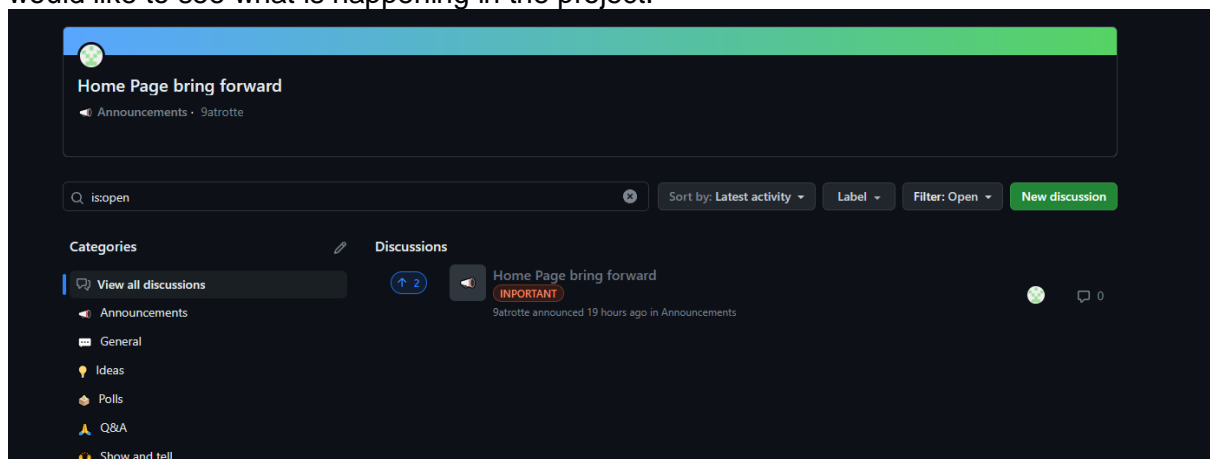
Bring forwards.

Bring forwards are bound to happen and as such these rules will need to be followed...

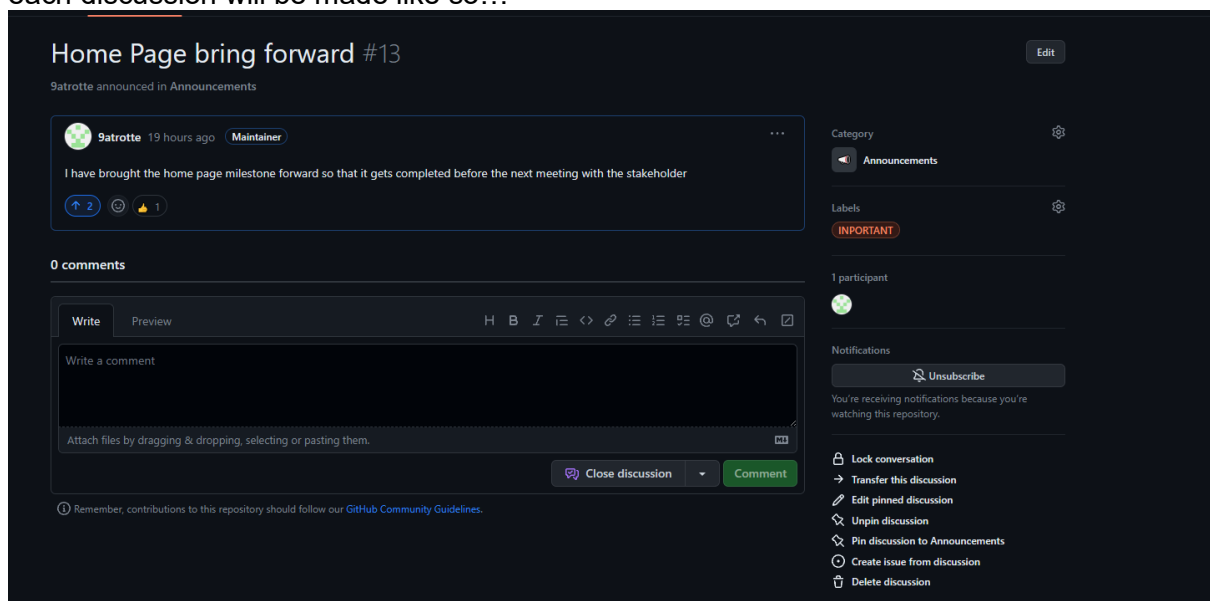
1. The bring forward will need to be announced in the discussions page.
2. A reason will need to be given.
3. New end date and projection will need to be given.
4. If these rules are not met the bring forward cannot happen and the task will need to be looked at later

Discussions

This will be a big part of the project, as I am the only person working on the project. Anything said in the discussions will be used for documentation purposes only, or if my stakeholder would like to see what is happening in the project.



The Discussion page looks like this, the main category is the announcements, this will be used for all announcements made.
each discussion will be made like so...



Title, content, category, and labels that are applicable. Latest announcement will be pinned, and a conversation can be locked if no other inputs are needed. Pinned discussions will be seen at the top of the discussion page.

Milestones

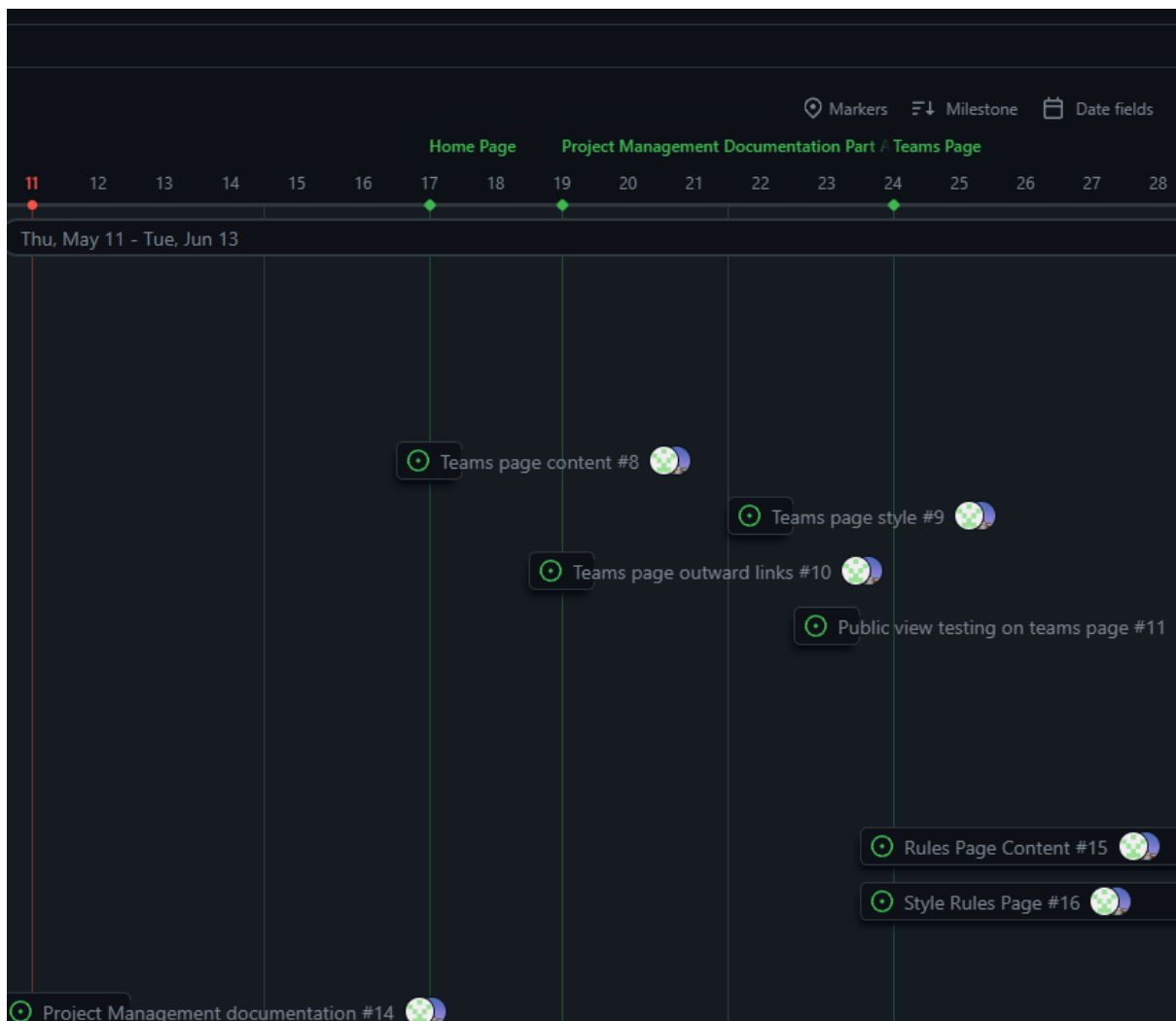
Milestones will be the main way to see that parts of the project are met, and to group multiple tasks together that share a common idea.

Milestones will be made by

1. Title
2. Due date
3. Description



And all tasks will be assigned to a relevant milestone and will show up as shown ^.

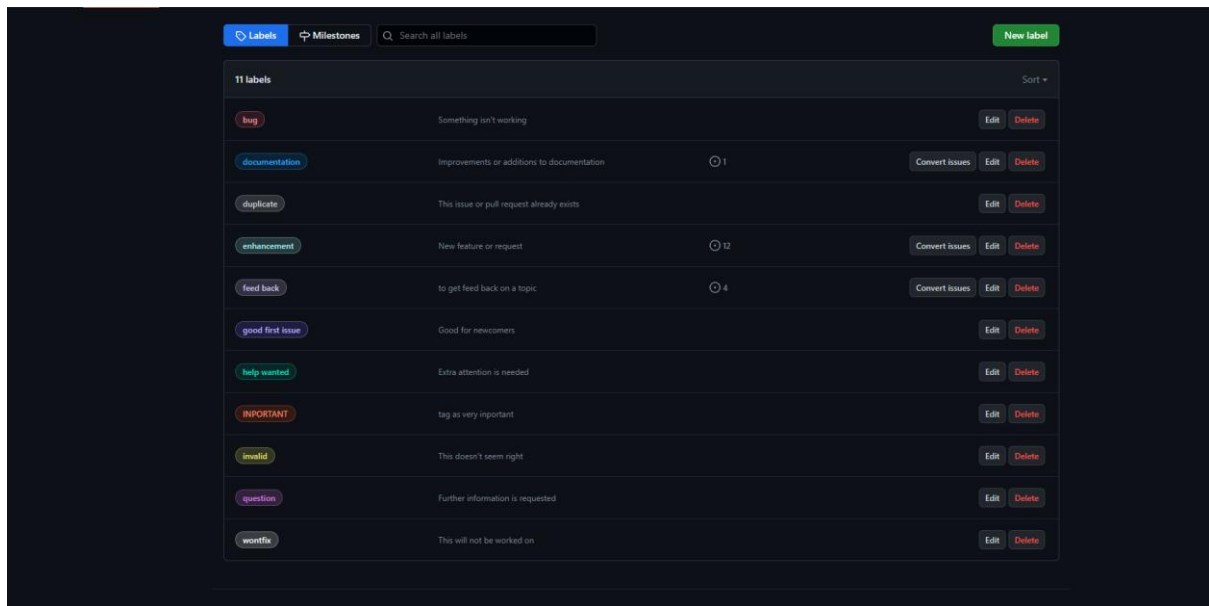


Milestones can be seen on the project timeline to show when it is due to be done.

Each milestone will have 2 public view tests; these will be scheduled anytime towards the due date of the milestone but will need to have a time frame between them to fix any issues that come from the first test, and a little bit of time after the second test to allow for any fixes after that test as well.

Labels

Labels can be made as we need them but will try to be made at the beginning of the project.



Labels are used as a bigger group of tasks/discussions as they show all the items that have each label on them. Each label will be made with a title, description and colour. Labels can be put on things however they want and will be used to reflect the purpose of the task and to show a reason for the task.

Commits

Commits will be the way that progress is being made on each task.

Commits will be used as follows...

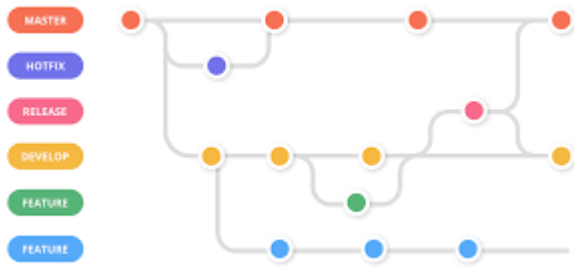
1. Each commit will be small and meaningful, not a big dump of changes.
2. A commit will be made at the end of day unless I have ended that day on another commit anyway.
3. Commits will need a title, and description.
4. Commits can be used to close issues, but this is not going to be commonly used, this will happen if the issue is of small nature and was more of a small bug found while completing the current task.
5. As a rule of thumb, a branch should not only have 1 commit in it unless the branch/task is of such small nature that only 1 commit is needed.
6. Commits can be reversed with another commit; these are free to happen and don't need documentation or announcement to happen.

Forks

Forks will not be documented or used but I am happy if other people want to fork my project and make suggested improvements to the project, if they are small like spelling or something like that, I will accept them, but any big change or feature will not be accepted as this is a project that needs to be developed by myself alone.

Git flow

Git flow will be used for this project and will be as follows...



It is missing one thing that is off each feature branch will be a component branch.

Feature = milestone.

Component = task (for milestone).

The master branch will be updated after each feature is ready.

Testing will be done in the feature branch and in the release, branch shown by tasks referencing [pull requests](#)

Branches

Branches will be used to separate out parts of the development process. They can be made whenever In accordance with [Git Flow](#).

Master branch: this will be the current live version of the project.

Dev branch: this will be the base for all features nothing will be committed straight to this branch it will only be used as a separator from the master branch.

Feature branch: there will be multiple of these branches and will be a representation of a [milestone](#).

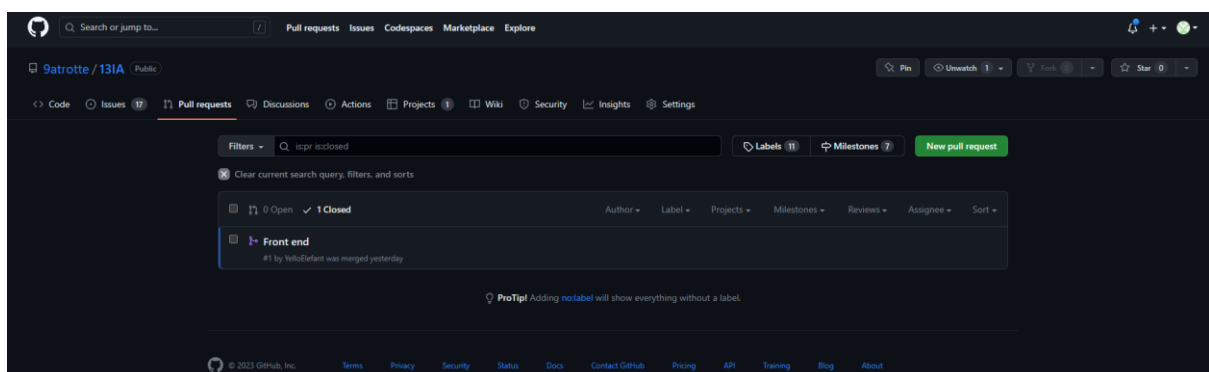
Component branch: this will be the branch that represents a task, this is so a task can reference a branch/[pull request](#).

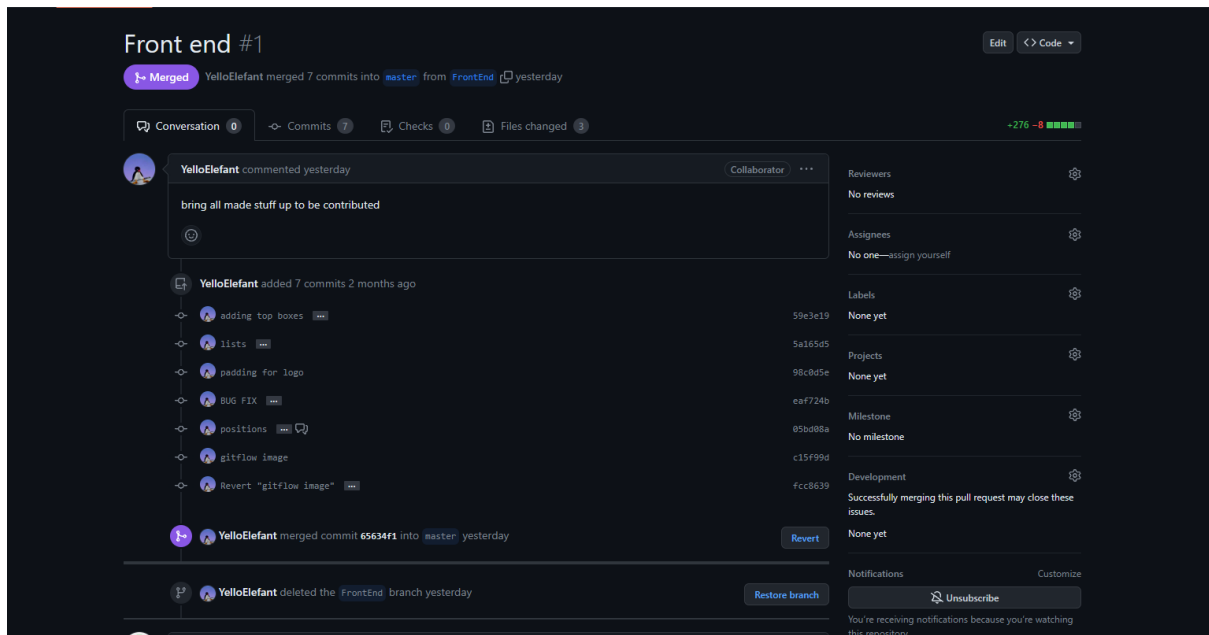
Hotfix branch: this will be a branch that is used as a quick fix straight off the master branch as if even after testing a review when it goes live there is a bug this will be used to fix it and straight pulled up.

Release branch: this will be used when a feature is ready for last testing and review and will be moved into the master branch.

Pull requests

This will be the merge of one branch into another, pull requests will be made when needed and will go under a quick review.





Pull requests can be either accepted or rejected, if accepted the branch will be deleted and the changes will be applied to the destination branch, a pull request will show all participants of the branch (commenters, committers, contributors) pull requests will be added to the project board, as they will be assigned labels, a project, milestone, and reviewers (this will be done at school and not at home). They can also be assigned issues to close so that when a pull request is accepted it will close any tasks related to it.

If rejected a reason must be given and new issues/tasks will need to be made to fix the rejection.

Pulls can be requested to be looked at by the stakeholder and will need to be scheduled for the next meeting.

Hot fixes

Hot fixes may happen, but all efforts will be to minimize this, if they do happen a branch off the relevant branch will be made and a task/issue will be opened for it.

Iterations

Testing iterations will be made at intervals and will be used to test parts of the project, each testing iteration will last 3 cycles of length decided in the moment, a task for each milestone or feature will be made to show what is going to get tested in that cycle, multiple will be made is more testing is needed over the iteration cycles.

1 testing iteration has been made just before the due date of the project; this will be used as a full testing cycle to test, debug and receive feedback on the project and each of its parts.

Merge conflicts

Merge conflict may happen when multiple features are being pulled, this will invoke that a new task is made to fix the conflict. This is not an important task as multiple features can be worked on at a time if needed and merging to other branches is not a big deal. Unless it is a component merging back to the feature branch this will need to be sorted ASAP to allow for the continuation of the project.