# ENGR101 Project 3

## Logs - Team 19

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## PLAN

We have tried our best to stick to the timetable but had to make some adjustments along the way to work with everyone's schedules.

- Team meetings every Tuesday 6pm

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|---|---|
| • 2nd June | • Plan Completion |
| • 4th June | • Start Core Code Ideas |
| • 9th June | • Implement Core Code and Debug |
| • 11th June | • Finalise Core Code and Start Completion |
| • 14th June | • Debugging Completion Code & Plan Challenge Code |
| • 16th June | • Finalise Completion Code & Begin Challenge |
| • 18th June | • Debug Challenge Code & Finalise |
| • 19th June | • Review and Submit |

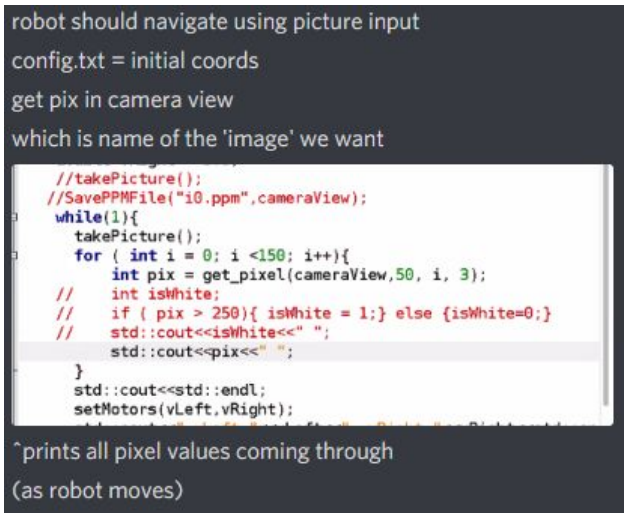
## TIMETABLE

**2nd, June**- *Tuesday*

- Today we had our first group call on discord that lasted about an hour.
- We discussed how we should go forward with this project and created the team plan with assigned roles. Although assigning roles we decided that It would not be fair to expect a sole person to work on the code so we will do everything together (in our planned meetings and frequently communicating on discord).
- Discussed our goals for the project and what our grade aim would be. We all believed that it would be best to aim to complete all 3 core, completion and challenge to the best of our abilities.
- Between Thursday and the weekend, we are going to individually see how we would tackle the core part and discuss our ideas in discord. Our next call is planned for Tues 9th June.

**6th, June**- *Saturday*

- What we achieved: Today Alex wrote notes on Arthurs lecture and uploaded them to discord for everyone to see.
- They are as follows:
    - We have to update everything from changes and ideas onto Github.
    - We are not allowed to do a lot of work in the last 3 day
    - We need to keep a log on how much individual time we spend on the project (individual log)
    - The markers check everything through github of our activity so it is important to remain active and upload our discussions not only on discord but onto Github too.
    - The report must have good punctuation and be presented nicely (proper fonts, paragraphs, diagrams etc)
- How to start code: while loop when running robot, build and make (not compile) robot automatically moves forward robot should navigate using picture input config.txt. (initial coords get pix in camera view which is name of the 'image' we want)




- Set '1' as white and '0' as the background pixels (green) The 1's are the location of the white line and they must always remain in the middle. It was suggested we use functions in the code.
- In the challenge the robot will have a little bit of red in the camera view, we need to make it go forward with the red outline insight to follow rather than follow a white line in the middle.

**7th, June**- *Sunday*

- Today Olivia created the Github team and made individual repositories for our Plan, Logs, Core code, Completion code and Challenge code.
- Olivia made a document for our team logs on google docs and linked the doc into a text file on github, Alex suggested we create text files for the individual days onto the repository as well to show our progress.
- Message breakdown regarding GitHub:
    - Suggested using Visual Studio as it is the most reliable since you are able to configure the terminal directly to Github to pull/push files from online.
    - Suggested we all start on the code and get it done (at least started) before our Tuesday meeting so when we get together we can integrate ideas and put the code together
    - List of commands for the terminal:

      Open your file directory with using cd (if confused what directory you in enter ‘pwd’ to print the current directory, enter ‘ls’ to view what is in the current directory)

      ```
      Set folder to project directory:
      CD C:\Users\User\Projects\Documents\Uni\ENGR\Assignments\Project3\engr101-project-3-plan
      ```

    - git clone //URL of project

      ```
      Once opening you terminal open the folder you will be working from
      Then clone a repository to your PC ONCE AT THE BEGINNING:
      git clone https://github.com/ENGRteam19/Plan.git
      ```

      Then enter email & username associated with your git account that has access to the files.

      You will be prompted the following:

    - git config --global user.email "you@example.com"
    - git config --global user.name "Your Name"

```
For example once you clone the file onto your terminal you will be prompted to log in with your info:
PS C:\Users\User\Projects\Documents\Uni\ENGR\Assignments\Project3\engr101-project-3-plan> git config --global user.email "you@example.com"
PS C:\Users\User\Projects\Documents\Uni\ENGR\Assignments\Project3\engr101-project-3-plan> git config --global user.name "Your Name"
```

**Cont. 7th, June**- *Sunday*

- git pull //get the file from the github repository(check for changes)

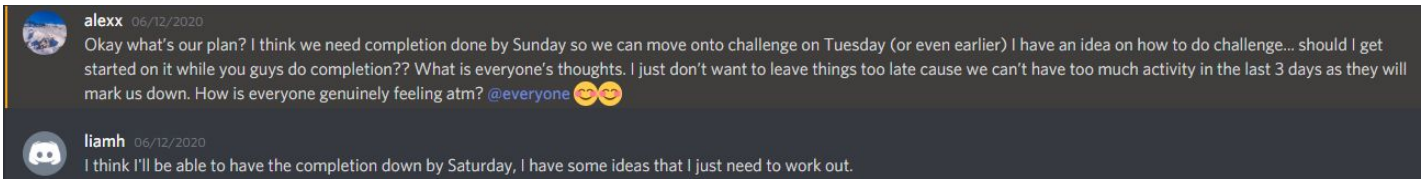
Set folder to project directory:
CD C:\Users\User\Projects\Documents\Uni\ENGR\Assignments\Project3\engr101-project-3-plan
Once you have signed in you should have the file when you use the command "git pull"

- git commit am- “text-here” //saves your changes to your local directory
- git push //uploads your changes to the file on github

If you've made changes to the code, save your file directly and use the command 'git commit -am "name of change" to save to your local repository for github.
git commit -am "testing git"
Use 'git pull' to check first if anyone has made changes to the file online, Then to add your changes online with the command:
git push //uploads to online repo (edited)

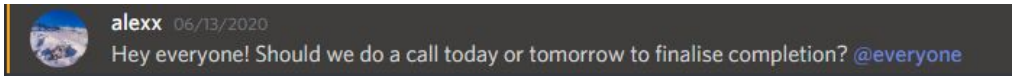
**11th, June**- *Thursday*

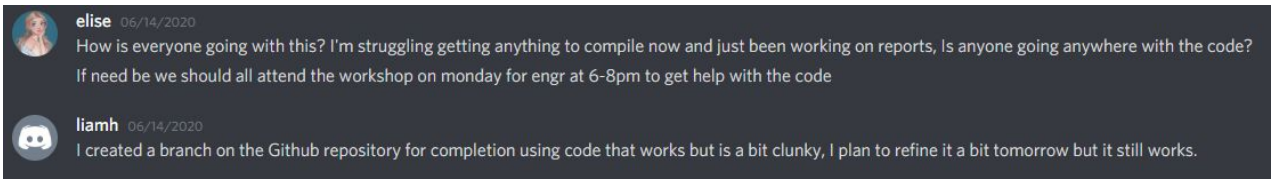
- Group call to begin the completion code, Call went for about an hour and a half and we unfortunately could not bring something together during this time. We all decided to go our separate ways in the weekend to work on the code individually and to communicate our progress on discord.




**13th, June**- *Saturday*

- From the team meeting on the 11/06 we decided to go our separate ways to work on the code.
- Liam came through with the completion code and we discussed on discord how we should go further.
- Decided on another team meeting Sunday 12/06 to start thinking of ideas for the challenge code and get a start onto it.






**14th, June**- *Sunday*

- Attended our planned meeting for 3pm.
- Discussed the ideas we should go forward with the challenge code
- Ideas included:
    - Store red values of the line
    - Work out the line thickness and how it corresponds with the camera view (how many pixels are shown in the camera)
    - The robot must always have the red values on the left hand side of the camera view for it to go forward,
    - If the red pixels slowly go away, like in the maze, get the robot to turn right.
- Worked on team logs and reports.

**18th, June**- *Thursday*

- Meeting 8:15pm to organise instructions/plan and code for submitting on Friday
- Alex went through and worked on the robot install instructions to run the program
- Maddie went through the core code to sharpen it up
- Olivia worked on team logs and the Geany/MinGW install instructions
- Liam completed the challenge code and is debugging.

**19th, June**- *Friday*

- Meeting in the afternoon and submitted code together.
- Reviewed code and instructions
- Submitted code  and instruction files

## REVIEW

19th, June- *Friday Submission Day*

Overall we achieved teamwork and maintained a good communication throughout the project.

Despite not sticking exactly to our schedules we originally planned, we tried our best to work around each others timetables and organised everything the best way we could with the resources given.

This project pushed boundaries and has helped build important qualities that will be needed in the future.