| **Date** | **Meeting Title** | **Information** |
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| 03/03/22 | Meeting 1 - Mentor Meeting | Discussed with the mentor what the general expectations for the project are, and what communications with the mentor will look like.  Members Present: All |
| 04/03/22 | Meeting 2 - Team Meeting | As a team we went over the team contract, discussed and wrote up the appropriate measures that we will all follow throughout the project. This was then signed off.  The plan for week 2 and planning for the client meeting commenced.  Members Present: All |
| 08/03/22 | Meeting 3 - Client Meeting | Meeting with the client, team notes taken:   * Detecting unsafe behavior in the workplace * Wearing body cams - like police * Camera hardware, * What to detect, PPE, lifting incorrectly, jumping over things, the person in the area so shut down machinery * Possibly build API and front end app * What hardware to use, can be purchased and provided, battery camera into consideration * What cameras and algorithms, recommendations can be provided * Detecting aggression and behavior   Following the meeting with the client, a brainstorming session with the client was penciled in for the 15/03/22 to help guide the research to be conducted.  Members Present: All |
| 11/03/22 | Meeting 4 - Team Meeting | Discussing the project proposal and beginning the draft.  Members Present: All |
| 15/03/22 | Meeting 5 - Team Meeting | As a team we discussed the project proposal and mapped out the timeline for the project proposal presented in a couple of week's time. We also began research into possible cameras that could be used for the project, creating a table comparing different viable models.  The mentor and client were contacted to arrange meeting times later in the week - the client responded during the meeting and questions for the client were discussed.  Members Present: All |
| 18/03/22 | Meeting 6 - Client Meeting | Questions presented to the client:   * Discuss our current research - finalized / brainstorm more on Tuesday * What statistics do you have regarding workplace safety incidents? * Is there an API model that you have that we can use/using the current one? * Will the cameras on the person be live streaming - like the current cameras are, or only when the employee turns it on? * Will this be implemented on a web / mobile app or both?   The meeting was recorded  Members Present: All |
| 22/03/22 | Meeting 8 - Client Meeting, in-person brainstorming session | Meeting was recorded on teams - transcript can be found there.  As a team, with the client and an employee of the company we brainstormed and outlined the project, the project requirements, the scope of the project will be and what needs to be completed in the next couple of weeks in terms of proposal work. Notes taken from the meeting can be found in the ‘In-Person Client Meeting 22/03’ document in the project google drive.  Photos of the planning:          Members Present: All |
| 25/03/2022 | Meeting 9 - Team Meeting | Discussed and planned for week 5 of the project, including deadlines for the draft proposal and what needs to be completed before then.  Members Present: All |
| 29/03/2022 | Meeting 10 - Mentor Meeting | Discussed the project cost and what templates can be used for this. Decided the time for the project proposal and week 6, and set deadlines for when the draft proposal should be handed in for feedback and when the final proposal shall be sent to the mentor  Members Present: All |
| 29/03/2022 | Meeting 11 - Team Meeting (included the mentor meeting above) | Meet up on campus and talk with the mentor (detailed above). We then created a timeline for the next two weeks to see what needs to be done for the project draft (version 1 hand in), the final draft hand in, the proposal report hand in, and then finally the proposal presentation.  Work was then completed on researching the correct estimated cost layout to use, as well as completing version 1 for the draft proposal.  Members Present: All |
| 30/03/2022 | Meeting 12 - Team Meeting | Meet up to finalize the draft proposal (V.01). The draft was then sent to the mentor as outlined in the meeting conducted on 29/03/2022 for feedback.  Members Present: All |
| 1/04/2022 | Meeting 13 - Team Meeting | During this meeting we went over the changes made from the given feedback of the rough draft and made a plan for the project presentation and began work on creating the PowerPoint presentation for the presentation being held on the 08/04/2022.  Members Present: All |
| 5/04/2022 | Meeting 14 - Team Meeting | Discussed the feedback from the final draft proposal and began work on touching up for the final proposal document. The PowerPoint presentation was also worked on and a plan for the week leading up to the presentation was made.  Members Present: All |
| 6/04/2022 | Meeting 15 - Team Meeting | As a team we read through the final copy of the project proposal and made some final edits before sending the document off to our mentor ahead of the proposal presentation.  Having practiced our sections of the presentation before the meeting, we all confirmed that we were within the time limit given.  Team Members Present: All |
| 8/04/2022 | Proposal Presentation | Today we had the presentation for our proposal that was held online to the mentor and moderator. |
| 12/04/2022 | Meeting 16 - Team Meeting | Meeting held to discuss the changes that will be made to the current project proposal to accommodate the feedback of the mentor and moderator. This feedback follows;  Hello team,    Thank you for your presentation today. Edmund and I would like you to resubmit your proposal in two weeks. We advise you to focus on the following key points:     1. **Present a clear list of deliverables identifying what you must deliver and what would be nice to deliver**  * The current scope is too ambitious (identifying and connecting camera, read data, put it through AI to identify behaviors, create mobile app, create website)  1. **Include a clear plan with deadlines against deliverables**  * The current plan is very risky and also has no details that allow monitoring of progress.  1. **Build a clear project-relevant risk register**  * Each milestone or deliverable has its own risks, the current risk register is very generic and some more details are required.     Please consider narrowing the scope of the project significantly.    We will mark the current proposal and forward the marks to the R&D project team soon. |
| 21/04/2022 | Meeting 17 - Team Meeting | As a team we discussed the changes that have been made up to this point to the proposal from the given feedback. We ran through the milestones again and will finalize these in our next team meeting along with the project proposal.  Team Members Present: All |
| 26/04/2022 | Meeting 18 - Team Meeting | We met today to discuss and run over the updated project proposal and then handed it to the mentor.  Following the mentor's recommendation given the same day about the proposal, a short discussion was held in a messenger chat and a weekly schedule document was set up.  Team Members Present: All  Mentors Feedback:  Hello team,    Thanks, the proposal looks better. There are still a few things to keep in mind:  The table of contents isn’t of much use if pages aren’t numbered.  The budget is still incomplete. While I agree that the exact values (number of hours etc) aren’t known, you have to generate an “estimate”. You can use a range of values (low-medium-high) for each variable.  It is still unclear how the project will progress. It seems a lot of the tasks are planned to be of very short duration (as per the Gantt chart) and therefore there seems to be no room for unexpected findings (more on this below).    —  Looking at progress till date and the Gantt chart provided, I am now very concerned that the project isn’t progressing well. One of my main concerns is that a majority of the members of the group are not putting in the 12-15 hours of work required on the project every week.    Going forward, I would like to request the following:    I would like to see a weekly schedule based on the sprint or iteration plan showing who is working on which task and how much of that task should be done by the end of the week.  The weekly schedule must be done collectively and allow everyone to pick the task they want to work on for the week.  At the end of the week, the team must do a status report. The target is to do at least 85% of the planned tasks, and the other 15% of tasks can be pushed to the next schedule. In the status report for learning purposes, you must identify the reason for not being able to complete all the work.  I encourage task sharing, two or more (even the entire team, i.e. mob work) individuals to work on a single task, and the weekly schedule must reflect this.  Please set up a recurring weekly mentor meeting (must be fixed for the entire semester) where the team presents the weekly schedule and provides the status report on the previous week’s work. Both must be uploaded to the team portfolio that I would like to have access to.  The consequence of a lack of satisfactory contribution, including lack of quality in individual work, will result in failure and require to re-enrol for part 1.  The team is expected to be co-located in the R&D lab to do the project work so that they can help, support, mentor and coach each other. This is a culture the team should have rather than working individually on their own.  Have an R & D lab timetable for 12 to 15 hours per week to ensure the team is co-located to do the project work. Tuesday is your R & D day, giving you 8 hours to collectively work on the project. Plus, look for another 5 to 7 hours in the week; the lab is open from 7 to 11 pm every day, including Saturdays and Sundays. The timetable should be followed rigorously for this semester, and you will have to plan a similar schedule for next semester.    Please set up a Teams group for the project where you upload your weekly reports and add me to it.    Regards,  Roopak |
| 28/04/2022 | Meeting 19 - Team Meeting | This meeting was held to discuss the way the weekly schedule and the weekly project reports are going to be run.  The weekly schedule spreadsheet and the weekly report documents were set up. The Teams group mentioned by the mentor in the email was set up as well so that these documents can be shared easily, and the mentor was emailed to be informed of the schedule we have set up and to ask when on Tuesday that the weekly mentor meeting would suit him to be held.  From now on, on Tuesdays, the weekly schedule and report will be sent to the mentor, and a meeting with the mentor will be held.  Team Members Present: All |
| 03/05/2022 | Meeting 20 - Team Meeting | This meeting was held to discuss the hardware research we have done and to finalize any questions we have for the client in our meeting with him later on the same day. The client however called in sick and was unable to attend the meeting. We have rescheduled a meeting with him for Friday (06/05/2022).  Edited the Trello board for the planning of sprint one to update.  Handed in last week's weekly schedule and weekly report  Began planning different scenarios that we might want to capture for model training - these will be discussed and further brainstormed with the client.  Team Members Present: All |
| 03/05/2022 | Meeting 21 - Mentor Meeting | This was the first meeting back with the mentor after handing in the updated project proposal.  Team Members Present: All |
| 05/05/2022 | Meeting 22 - Team Meeting | This was a quick team meeting to discuss the questions that we created for the client meeting tomorrow, as well as the scenarios that we brainstormed for model training.  Team Members Present: All |
| 06/05/2022 | Meeting 23 - Client Meeting | In this client meeting, we brainstormed possible scenarios for model training and lens detection. And we decided to use the Raspberry Pi camera for testing during model training.  Team Members Present: All |
| 10/05/2022 | Meeting 24 - Team Meeting | During this meeting we went over the research we had done into cameras and the different price points of the different cameras that we had conducted over the weekend and began to narrow down the list to send to the client to purchase.  We also completed the past week's weekly report and wrote up the weekly schedule for our team this week.  Team Members Present: All |
| 10/05/2022 | Meeting 25 - Mentor Meeting | During the mentor meeting we discussed what information was gained during the client meeting on Friday with the mentor to update him. We then each individual showed the mentor what work we had completed since last week's meeting, and from our individual progress, we were given roles that will help us divide and concur on the tasks that needed to be completed in the next week:  Julia - Product Owner  Ray - Sorting which IDE will use for code and model training  Sai - Ranking all the camera options  Gary - Finding open source DataSets for PPE detection for model training  Jerome - Continuing to work on training a YOLOv4 model  Team Members Present: All |
| 13/05/2022 | Meeting 26 - Team Meeting | During today's meeting we finalized that VS Code will be the IDE that we will all work on, as this is the IDE used by the client and is the most commonly used IDE between all team members. We also decided that we will be using the Google Collaborate notebook for model training. Links provided by the client were also discussed.  The client was sent a message asking for a meeting on Tuesday 17/05/2022. In this meeting, we are wanting to discuss our finalized hardware choices with the client and get an example of some model training from the client.  All Team Members Present |
| 17/05/2022 | Meeting 27 - Team Meeting + Client Meeting | Today we meet the client to discuss the choices of hardware that we had compiled. We also wanted to get help with the setting up of the YOLOv4 model.  The client was able to help out with both of these and answer some other questions we had (seen in the client meeting 4 notes in the portfolio).  After the meeting, the client was sent the links for the hardware, and this was ordered today.  We also as a team before and after the meeting completed our team's weekly schedule and the weekly report and added these to the team's group.  The mid-term report and presentation were also discussed and we each have allocated sections of the report to write a draft and will read and edit together on Friday's team meeting.  Team Members Present: All |
| 18/05/2022 | Meeting 28 - Mentor Meeting | Today’s meteor meeting was focused on updating the mentor with our progress that has been made in the past week and with the client during yesterdays meeting.  We received positive feedback from the mentor regarding the improvement of momentum in the project.  The meeting started a little late due to wifi connection problems with the mentor.  Ray was not available but updated the team and mentor via messages and email.  Team Members Present: Julia, Sai, Gary & Jerome |
| 24/05/2022 | Meeting 29 - Team Meeting | As a team we discussed the weekly report and schedule and uploaded these to the team's group for the mentor to see.  We then began setting up the raspberry pi, after trying to get the pi running on a team member's laptop, the pi was taken home with Ray to continue the setup process. Next week when we meet in person for workshop hours, we will use one of the client's monitors to run the raspberry pi.  As a team, we also discussed the mid-term report and will meet tomorrow (25/05) to discuss and run through the draft as a team.  Team Members Present: All |
| 25/05/2022 | Meeting 30 - Team Meeting | A quick meeting was held today to discuss the draft for the mid-term report. We read over sections of the report that have been written and provided some peer reviews.  Team Members Present: Julia, Ray & Jerome |
| 26/05/2022 | Meeting 31 - Team Meeting | A follow-up from last night's meeting to further discuss the mid-term report with more team members. More peer reviews were conducted and as a team, we discussed the mid-term report presentation and what needed to be done beforehand in the report for 27/05/2022 to the mentor.  Team Members Present: Julia, Ray, Sai & Gary |
| 27/05/2022 | Meeting 32 - Mentor Meeting | During our mentor meeting today we went over when the mid-term presentation was to be held and the hand-in details for the report and our individual work logs. The presentation will be held at 10 am on the 31st of May in person with the mentor and moderator.  We then showed our work individually to the mentor to update him on what has been done in the previous week.  The mentor also mentioned being able to book out a room for us to use to store and work on the raspberry pi, he was then emailed our team details so that we can all acquire access cards to this room. |
| 27/05/2022 | Meeting 33 - Team Meeting | Following the mentor meeting we discussed what needs to be done before the presentation on Tuesday and read over the mid-term report as a team. |
| 30/05/2022 | Meeting 34 - Team Meeting | We meet today to discuss the mid-term presentation and what was needing to be done before the presentation tomorrow. A time was also made to meet one hour before the presentation so we can practice as a team. |
| 31/05/2022 | Mid-term Report Presentation | This morning we had our presentation for the mid-term report. We meet up an hour before the presentation to go over the presentation as a team.  Following the presentation, we had a chat with the mentor who gave good feedback. |
| 31/05/2022 | Meeting 35 - Team Meeting | After the presentation, we went to WZ701 to go over the weekly report and schedule, as well as the feedback we received from the mentor regarding the mid-term report. The report read as being rushed and was missing details of all the work that we had done since week 7. As a team, we went through the report and discussed the work that was there while reflecting on the work that has been done and adding to the report from this reflection. |
| 1/05/2022 | Meeting 36 - Team Meeting | As a team we went over the changes that have been made to the mid-term report following the feedback from the mentor. We agreed as a team that some changes still had to be made, so these were done later on this same day, with the mid-term report being sent to the mentor the same day. |
| 09/06/2022 | Meeting 37 - Client Meeting | Notes from client meeting   * Small tweaks to 10% of videos in data labeling * Yolo client ide * Running on servers * Image and label file with the bounding box positions on it * Yolo label * Looking at everyone in the camera view * Training sets and test sets * Consecutive frames from videos work well * Include solar flares? Generalize with lots of data * Train file, with the list of all the images that will be training with * And other configurations for yolo * The validation test set is used to specifically give the model data it has not seen before * Do training in a docker container, there are yolov4 docker containers * The whole team to set up docker! * Config file - the client can help us set up * Use the map command to show map, which will include the accuracy * Use python to turn videos in frames, upskill in python * Collect data! * Use client models for sudo labeling * Can train model on client server * Get the raspberry pi streaming video, pull out every 5th frame from the videos |
| 08/07/2022 | Meeting 38 - Team Meeting | Our meeting today was to catch up as a team after some time off during the mid-semester break and make a plan of what we want to achieve before the start of the second semester (18/07). As a team, we discussed that we want to have the camera functional and ready to go to capture footage to train the model. More research in data sets for the model will also be carried out, as well as research into how the camera will be worn. |
| 18/07/2022 | Meeting 39 - Team Meeting | As a team we met up and discussed what had been done since the last meeting. We then set up the schedule for the coming week and sent this to the mentor while also organizing the first mentor meeting for the second semester (to be held 22/07).  We then set up the RaspberryPi and tested some video recording scripts as a team. Test videos were taken and will be used to practice data labeling as well as breaking down into frames for training the model. |
| 25/07/2022 | Meeting 40 - Team Meeting | Our team met in person again today and wrote up the weekly report for last week and the weekly schedule for the coming week. The mentor was emailed and a meeting was set up for 27/07.  The Raspberry pi was set up and a script was tested that took a video and then converted it straight to a .mp4 file. As a team, we also found a way to connect the pi to a wifi connection while on campus and downloaded the pip3 extension for azure blob storage. |
| 27/07/2022 | Meeting 41 - Mentor Meeting | Our meeting with the mentor was held on teams. The mentor gave good feedback and was updated on the current progress of the report. Weekly in-person meetings have been set up for Wednesdays at 10 am. Below was a summary sent by the mentor:  Task for next week:   1. plan for all deliverables in S2 2. Julia    1. worked on RPi video script and database    2. to work on DB - setting it up 3. Ray    1. camera script    2. work with Julia to get videos uploaded in a streamlined way 4. Jerome    1. Model training, processing of videos    2. continuing on model training    3. to send Roopak a couple of lines for expertise he is looking for 5. Sai    1. research how to mount the camera    2. recommend final setup to be used to capture videos (post client meeting) 6. Gary    1. Learning python and looking for dataset    2. dataset selection - alignment between training and actual datasets (check with the client) 7. Questions to ask clients    1. real-time or delayed classification?    2. dataset selection - own or borrowed/alignment between training and real datasets |
| 1/08/2022 | Meeting 42: Client + Team Meeting | Notes from the client meeting in the ‘Client Meeting 5’ document.  As a team, we went through what had been completed to this point and recorded this in the weekly report and weekly schedule.  We also worked on the raspberry pi trying to get a script running as a team, as well as recording videos that we will use to test for data labeling. |
| 03/08/2022 | Meeting 43: Mentor Meeting | As a team we meet with the mentor in person. We ran through the updates to the project and informed the mentor of updates on the concerns from the previous meeting which have been noted in the ‘Client Meeting 5’ document. |
| 08/08/2022 | Meeting 44: Team Meeting | We met as a team to discuss changes to the raspberry pi and worked on getting TeamViewer.  Due to the client being sick and not able to set up the Azure Storage, CVAT and virtual machine, progress on the project has been slower in the past week. |
| 10/08/2022 | Meeting 45: Mentor Meeting | As a team we meet in person with the mentor for our weekly meeting. The mentor was updated on the project's progress and informed as to why progress was slower in the past week. The mentor gave recommendations of things to think about moving forward, specifically revolving around the assignments that are due at the end of the semester. To visualize how all of our individual work is coming together the mentor recommended we make one of the following to present to him next week:  Pipes and filters diagram  Block diagram  Process diagram  Sequence diagram |
| 15/08/2022 | Meeting 46: Team / Client Meeting | As a team we meet today to take the footage to model train within the clients PPE. We also tested the raspberry pi scripts and used the raspberry pi with TeamViewer which was successful.  As a team, we also discussed the draft diagram and wrote up the weekly report and weekly schedule. |
| 17/08/2022 | Meeting 47: Mentor Meeting | As a team we meet with the mentor to discuss the progress of the project and informed the mentor of the progress made in data labeling, research into the battery pack for the pi to make it wearable, and updated to the raspberry pi and model training. The mentor recommended making the following diagrams to help our team when it comes to the presentation at the end of the semester:   * Package diagram * Deployment diagram * Sequence diagram   We also have received guidance on questions to ask the client at our next meeting which is being organized for week 6 of the semester. |
| 22/08/2022 | Meeting 48: Team Meeting | As a team we meet to discuss changes to the project. This meeting was moved online, and as a team, we went through and wrote out the weekly schedule and report.  As progress has been slower this week there wasn’t as much to discuss but the plan for the semester was updated and the assignments were discussed |
| 24/08/2022 | Meeting 49: Mentor Meeting | As a team we met up with the mentor to discuss the project. We let the mentor know of the plans for the client meeting that is being planned. Discussions surrounding the usefulness/effectiveness of training the model with pre-defined datasets will be discussed with the client. |
| 29/08/2022 | Meeting 50: Client Meeting | Notes for the client meeting can be found here  <https://docs.google.com/document/d/13-arSQEhkCLv8eLKnuIrdeJy82fBQkTX1q5QRt7ruiY/edit?usp=sharing> |
| 31/08/2022 | Meeting 51: Mentor Meeting | Quick meeting with the mentor to update on progress. |
| 08/09/2022 | Meeting 52: Team Meeting | Meeting as a team at the client's workplace to take videos to train the model.  As a team we made a plan for the work that needed to be done to achieve the prototype, these have been outlined in the semester 2 deliverables timeline document. |
| 19/09/2022 | Meeting 53: Team Meeting | As a team we had a meeting via Messenger to sort out the weekly schedule, as well as what work had been completed since the last meeting during the mid semester break.  We also sorted out as a team what work needed to be done before the meeting with the client which will be held on Friday 23/09. The client was contacted during our meeting and agreed to this date at 10:15 am. As a team, we have agreed to meet at 9:30 am at the client's place to film some more footage using the raspberry pi and the client's PPE equipment |
| 23/09/2022 | Meeting 54: Client Meeting | As a team we meet before the meeting with the client to take a couple of videos on the raspberry pi with the client PPE gear that is kept at the office.  Client meeting notes can be found here; <https://docs.google.com/document/d/1WpGYCYstB5mEde7qMn92CAzKT1jb9PNX5eQwAqo_CBk/edit>  Following the meeting with the client and following the client's advice, the raspberry pi script was modified and around 17minutes of footage was taken around the office that will be used to train the model with.  The footage will be uploaded to Azure Storage and will be transformed into frames so that the data can be quickly sudo labeled by the client. |
| 28/09/2022 | Meeting 55: Mentor Meeting | A quick meeting with the mentor to update on the progress of the project. This was followed up with a catch-up of the present team members of the team where we each updated one another on our progress. |
| 3/10/2022 | Meeting 56: Team Meeting | This meeting was held on campus to go over the weekly report and schedule as well as work through the final bits needed to be done to complete the prototype |
| 5/10/2022 | Meeting 57: Mentor Meeting | We discussed the other team member's contribution to the project as their section of the project has had some bumps in the road. We also discussed that the mentor would like a demo of each team member's individual contributions to the project in the next mentor meeting. |
| 14/10/2022 | Meeting 58: Team Meeting | As a team we meet online to edit and hand in the draft text for the poster. Once this was completed, the draft was sent to the mentor for feedback. |
| 17/10/2022 | Meeting 59: Team Meeting | As a team we meet on campus in person to complete the weekly reports and schedules that were sent to the mentor. Problems regarding the training of the model have been discussed, and a plan for what work needs to be completed was discussed. |
| 29/10/2022 | Meeting 60: Team Meeting | As a team we meet online to discuss the final pieces of the project that need to be completed beforehand in the portfolio on 31/10/2022. As Julia and Ray are finishing up the scripts for the raspberry pi, the other team members (Sai, Gary & Jerome) were assigned to add all the documentation that we have stored in google drive to GitHub - where our portfolio is being set up, as well editing and designing the team poster. |
| 31/10/2022 | Meeting 61: Client Meeting | Today we met with the client to go over the final deliverables of the project beforehand in, as well as discuss and start to prep for the demo at the poster presentation next week (08/11/2022). |