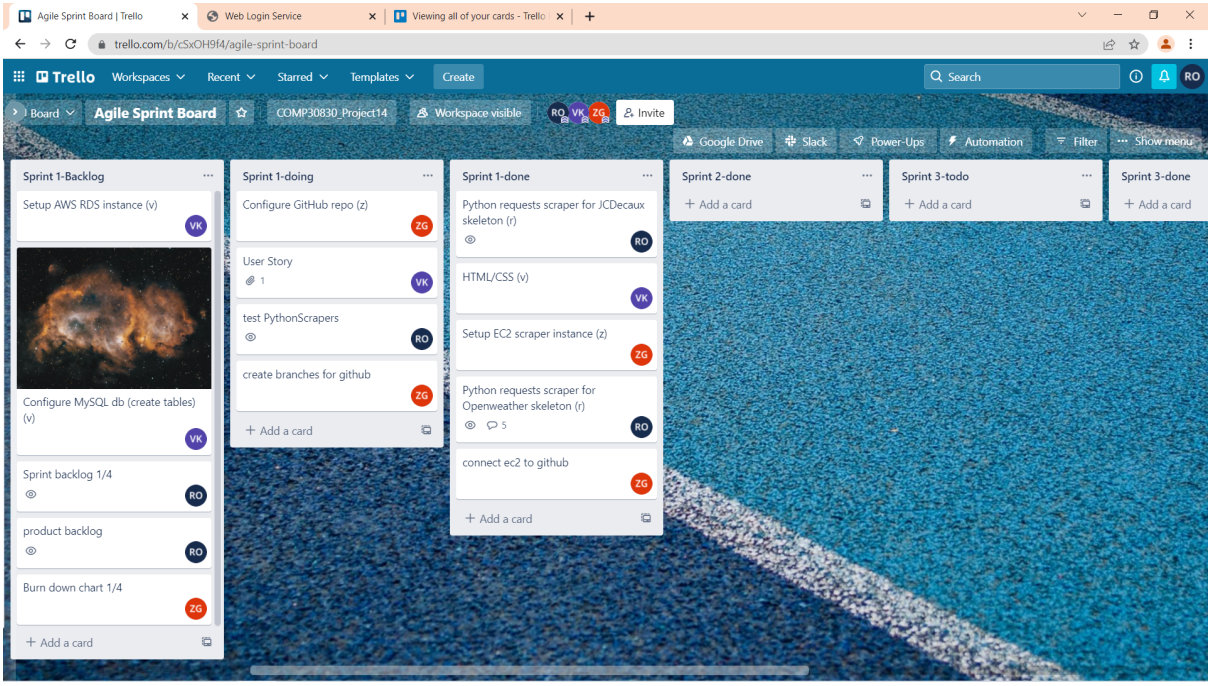
MEETING NOTES FOR PROJECT 14

Victoria Monday - Rhys Wednesday - Zaur Friday

Sprint Planning 5.2
We planned who would do what jobs, jobs were given out evenly, see below.



Scrum Meeting 9.2.
Z - Spent an hour looking at ec2 and configuring github repo, more difficult than expected, settings are important, almost finished github repo, going to add r and v as admins on github, ec2 already set up, ssh'ed into ec2, just a trial run currently, does not foresee future issues. At the end of two weeks figure out how to connect different components together.
R - static data available, if loop query to get static data from json, v likes this, has to figure out how to make web scrapers for both jcd and weather, and then code it up, once one is done the other should be relatively simple to do, with the aim to do it as soon as possible, should ask owner what to do
V- static table easy, dynamic could be more difficult, rds instance will be collaborated on with zuar, z said we should know what to ask owner, schedule a set time with Eoin weekly at 10 on thursday
Z - during the second sprint it is important to get as much as possible done, once data stored and scraped make a nice dashboard. Since we already have static data we can easily work with that, can make decisions about design philosophy during second sprint, will be relatively easy to design front end, functionality is key,
V- first sprint focused on connectivity,
z - first sprint about getting parts functional, march break is when the project should come together - unsure as to what the product owner does.

Owner meeting 10.2

Spoke with the owner about specs, and what we are expected to have done for the end of the first sprint.

Scrum meeting 11.2
Victoria and Rhys spoke at 2pm about the project.
Zaur was not able to make it until 2:30 as there was a slight change of times which he did not know about until later. Nonetheless Victoria stayed on until 3pm and filled Zaur in with the conversation and relayed information back and forth. Rhys and Victoria discussed the projects and updates and Rhys confirmed completion of the OpenWeather scraper.
Victoria has been completing the RDS and working on deploying it once Zaur has finished the EC2 scraper instance
Zaur has completed the GitHub repository set up and created a branch and more for the team. He is now finishing up the EC2 scraper and plan is to be ready by the end of the week.

Scrum Meeting 14.2
Rhys mentioned he completed the openweather scraper
Victoria Discussed the Dynamic SQL and mentioned it was still in progress, awaiting scraper to pull data
Zaur reported that the EC2 was ready and weather scraper was pushed to the EC2
Zaur also mentioned setting up Github branches for compartmentalising the work and working on burnout charts.

Owner Meeting 17.2
Go through what we said we would do last week
How scrapers are getting on
V said that we regularly use trello for managing our tasks
No sprint1 doing when sprint2 active
Zaur showing github, Eoin seems happy enough
Showed Eoin that branches are in the project, he said that we shouldn't be using main branches, that we should be committing to branches in case anything would happen to main.
We said that burndown needs to be done, and story/product backlog are works in progress, and that sprint backlog is done.
Said we done too much work for story
Z showed Eoin instance, z asked if it should be on all the time, Eoin said to be weary of costs.
Eoin said scrapers are okay
Z asking about rds, discussing cost, should use standard, do not put passwords up on github,
E said not to go too forward as some parts may not align with what is expected in the module.
Meeting ended.

Minutes meeting
17/2

V: discuss what the product will actually do and look like
R: user will open the app, see bikes and get an idea on availability
Z: we will be able to use a heat map type function to make user view it in a user friendly way
V: the weather data will go to the bottom of the page, if we just do dublin, it is not going to change for each station
R: how will it affect what we are doing?
Z: I will need to do the product backlog and such soon, will do it this weekend
R: say one station is 200 meters away and another is 100 meter away, what will the weather actually make?
Z: we are not making a high level representation of the weather
V: the main thing we need to predict the busy bikes times, when the most bikes will be taken, that impacts more than the weather if someone makes a decision
R: q to victoria, we are getting real time data from the bike station
Z: what i imagine we will be doing is, creating a linear regression model which gives us a % of probability of something occurring, in this case, capacity at a given time of day, so like a prediction of how many bikes will be available at a given, and this prediction will be used then to give a coefficient so we will get some sort of integer out of 10, and higher meaning more chance and lower meaning less chance, and this figure will then be used to make a decision and hopefully be what offering
V: predicting how many bikes will be there in an hour or next hour
Z: that will be the most difficult task
Z:
https://scikit-learn.org/stable/modules/generated/sklearn.linear_model.LinearRegression.html
R: could we possibly do some type of business, it will tell us the busier than usual or less busier than usual, sorta like how google does it.
Z: high correlation between weather and bike occupancy
R: for this weekend, let's sit down and figure out what we need to sprint

Minutes 22/02

Began at 9am by all three discussing Monday lecture and find an overview of what Sprint 2 entails, coming to find that it revolved primarily around Flask and REST API.
Z added he has burndown chart for Sprint 1 done, and said he will post it to Trello.
Z mentioned updating cards relevant to Sprint 2 on Trello.
All three discussed Sprint 2 backlog, agreed more information was needed to be gathered over course of week in order to get into exact tasks.
All three discussed how to distribute overview of tasks this week based on lecture information.
R suggested Z continue working on SRS and backlog, Z agreed
V suggested R work on initial Flask development, R agreed
V said she will work on UI template, wireframes and HTML Zinja
V mentioned a dev branch could be set up for everyone to contribute and pull from for working on project without compromising main branch.
All three discussed the expectation of Flask to be a large quantity of the project, and agreed everyone should contribute. It was suggested that while R lays groundwork, V and Z will work on their respective tasks first before working with R on Flask Development.

It was agreed that once a further understanding of the Flask element of the project is gained, everyone will reconvene to discuss further on how to divide Flask based tasks between them.
Meeting was concluded at 9:21

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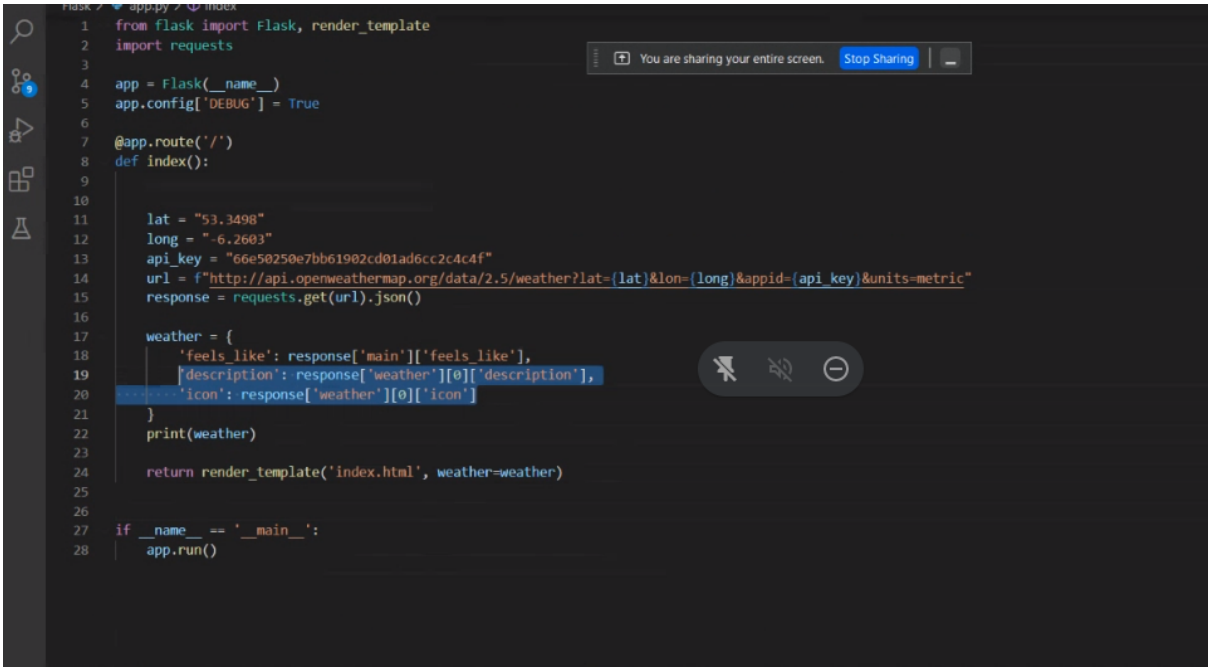
Owner Meeting - 24.2 - rhys
E - wants to see github
V - sharing github
E - eoin looking at github says everything is okay, just giving advice about how to structure github branches, use a developer branch, to spin off branches. Getting used to git terminal is very useful. Z concurs.
E - data analytics is important, scrapers need to run for a month, to actually run data analytics. We need to have scrapers running on ec2. Should check on a daily basis.
V - found setting up her database difficult.
Z - found delegation difficult.
R - good group cohesion.
E - said to keep working on the flask, and that good start.
V - is designing the website.

Z: How is everything going?
V: You set up a notebook, parsed data into a json file (as a workaround) and will work on it this week
R: Showed us a photo and screen share of the computer and the map and said he has some ongoing issues but is working on it
Z: What would you like me to do?
R: You can work with me on the Javascript
R: On our website we want to show weather, it is currently being pulled from the json
R: He wants it to be pulled from the database from the EC2
R: SQL query
V: On the actual webpage, we are only pulling the weather from the database and the prediction model is only based on what we have



Z: I will implement it so it pulls the data from the EC2 hello zaur
Z: Setting up flask on an EC2
V: EC2 details on the main chat
R

31/03/2022 - Sprint 3 second half meeting

Z; hey how is everything going
E; weather widget is very centre, by putting 2 divs, icon in 1 and it takes up half that div space. The other half would be the written info like temp and everything like that, just as much to utilise the screen space.
V;
R; when you load the page the first time, it asks you where your location is
R: we have routing functionality too
E: that is perfect, what happens when you click one of the icons
E; that is really impressive, good job
E; everything looks good, no extra features, lots of features implemented, try something out and do a radius around the user, google provides a code dto do this, it is a simple function, decreasing or increase the radius for the user, if we have extra time,
E; anything that is difficult , every feature we implement, routing data and stuff like that, extremely obvious that we may not have to, it can be unfortunate, make sure everything else is on that. Burndown charts, meeting scrum info and screenshotting the github, tidying everything up and writing the report, the srs is a sales pitch (design pattern), report is teamwork and etc
E; product owner asked for new features product
V: working on the data model, showing her screen, vic is doing a linear regression and is experimenting with adding and removing some features, but eoin recommends trying a different type of model and in the report we can mention it.

E; we just wanna see your decision making and planning, and tried to optimise our results, and play with the features see what is contributing and such
E; you can discuss you started off with a lot of features and changed some and added some and discuss this in the report. Everything in the report should include all features and how it was implemented, how we improved our score. Ec2 ran out, mention that we are all new, mention any clashes, our novice methods, show off everything you guys did
Z; thank you for all the information
E; hide/show stops with radius if you get a chance
E; just find it on google, and try to implement it
E; try to pull it from the database and not from the api
Z; try to do it that way
E; just using the code from drawing from a database and changing it around
E; if you eventually put it on to github and getting from API, it could be problematic
E: when you do the report explain why you did it one way, and my recommendation of changing it from api based to rds based
E; good job well done looks great good luck, sprint 4 tidying up
E; just try to have some people to have a say in the report

05/04/2022
Z
V
R what is the latest with the css?

Z; any progress on javascript?
V: have not got around to it yet, once i train the forest thing on data analytics then I will run the api and fix the css. The forest regression is done
R; basically what my tasks are is trying to implement distance and time in javascript location./ trying to implement on top of it more info, also i want to default origin to be your current location, it is very finicky, trying to figure out how to mess with previous code to get what i want. Ive been trying to do things with the boxes on the map to make it look nice. Basically looking at the javascript to try make it look nicer. We really want the distance at the moment. Even the bike stand at the moment, if someone wanted to put the bike back it gives you a different color. So i dont know im just doing these menial tasks.

V; i was just running into small bits and the size of the file, from time to time it would tell me the x and y lengths were completely different lengths or whatever and they wanted them to be the same, it was just working around that I suppose, it works. The actual accuracy score though is 99.9% the score is much better on forest and much less than linear regression. The forest regression was stronger than the linear regression, i just followed long with the guidelines. In the data analytics carries more weight.
Z: have we pickled the data model?

V: so ive pickled the data model and im trying to figure out how to and load into the api and pull the station specific data
Z; any issues you ran into rhys ?

R; when we tried to run the color coding, victoria made custom jpegs for it and the actual google didnt like them very much, they much preferred their own images, so having custom images was very difficult to use so i stuck with the default google images.
Z; follow up question Rhys, what is the biggest challenge you faced so far?
R; biggest challenge i faced with javascript, to make each part of code to work, different methods going on at once, and if one breaks all of it breaks, dealing with various functions
Z; general question, are we up to date on ec2?

R; i found a difficulty to layer the functionality in javascript
V; usage is at 35% we are all good.

Z; will we make it to the end of the module?
V; yes i am confident
R; what will happen when we stop running the ec2?

Z; it does make a great cv application
V; well i still need to get the api to pull the station data, once that is done and test, hopefully the implementation to the javascript
Z; could you explain more V?

Z; import a pickle file into it and make requests but i need to request the static station data, a function and the query in the function to do that, and suppose just trying to configure everything rather than code involved
Z; any specific variables you took out or adde
V; the categorical variables so like address name, i thought station number was finer, i took out longitude positions because number can be confusing and do not need to be added. The latitude and longitude were not needed to churn the model.

Z; anything we would add if we did further development down the line?
V; we should have pulled more weather data like what we had was temp, what it feels like and wind speed. What we didnt have is precipitation (rhys says there was no precipitation).
R; i dont know if general traffic would have impacted bikes, when it comes to something like that i dont think traffic would influence someones decision, it would influence a decision if you were to walk somewhere and would not impact

R; the only thing is and potentially is pressure and humidity we didnt add to our model, and vic says its always humid here.
R; ireland is quite humid and with low pressure can bring a lot of humidity.
Z; preparing for next product owner meeting with Eoin
Z; we used seaborn package
Z; could you summarize work done on sql?
V; sql is the database that stored everything that i needed to train the model, integral to the whole thing,
R; i dont know what architecutre, we did very little of flask, we actually did not use much, in my end, we didnt use much flask.

V; it was easier me to put a separate program that didnt incorporate flask, in regards to the API it will have to use flask, so we will get some functionality out of it. I remember when he showed flask.
V; data analytics in the backend will be implemented into flask and predicting the specific stations.
Z; finish the 3 excel files for sprint 1, 2, 3

E; second last meeting, we are now into sprint 4, one of the easier sprints, working on the report, as well as just finalising things that are not finished anything you haven't finished, needs to be done, once this sprint isdone you have nothing left to done
V; sorry rhys to kick you off, just finding the tab, tried a random forest regression, it was a significant improvement, it moved very well, and score came out very accurate, i decided to split the model into different days, from there I have done a prediction test and everything was good from there at least, and I just created a graph to show the time for each day, and so from there I have been working on implementing the flask app/api, i still working on configuring it and there is quite a bit of progress
E; what split did you use your training set vs test set, what % went into with
Z; we learned this in another module data analytics
V; created a javascript file, a chart using the chart app
Z; has been pushed to git yet?
E; if anything happens to
E; appendix page, make one for all screenshots and such, written report, you can submit the meeting, screenshot of this file and daily meetings, burndown chart in the screenshot,
E; works over the next week, the big thing is the over the next week finalize any css or stuff like that, this time next week i'd like to see a website
E; show me your website, no presentation, show me the final product
Z; i set up the flask app,
E; keep an eye on the ec2, still working, 2 or 3 weeks
E; look at how to make it easy to view on google chrome, works fine on mobile and such