**Questions:**

What're the main objectives of this project?

A: Avanade4 is a professional service company, focusing on technology and digital innovation. Consultancy firm that deals with oil and gas companies, finance, public sector etc. We operate where Microsoft and Accenture operate. Microsoft specialist for Accenture. Accenture focuses on AWS, Google Cloud etc. Using Microsoft technology, if we need any other technologies we can request for them. They’ll be helping us set up an account. Main objective is to merge different projects with Digital Ethics. Explainable AI is to visualise data, for example regarding ethnicity, recognizing behaviourisms in certain individuals and identifying patterns on why some people behave the way they do.

Final objective: to produce a working prototype to talk through - can be a static prototype, long as can be explained

Encouraged to open-source codes

What does explainable AI actually mean?

A: Allowing people to see why an AI system makes certain decisions. Deals with why certain AI have biases.

What's the timeline for this project?

A: Refer to Dean

What technologies will we be mainly using? Any languages or IDEs in particular?

A: Microsoft Azure. Specific technologies will be up to us, use Miro to figure out in case we get stuck.

No specific language requirements, Fergus has preference towards Python

Any similar projects that we could refer to?

A: Not a new

What operating systems will we be using with this? Linux, Windows etc.

A: Cross-platform cloud-based applications

Who are the users for the app?

A:

Example: government database team & AI powered assessment e.g. A Level selection

Database team concerned with data, not the AI algorithm

Public scandals regarding AI decisions, database team not aware and cannot figure out the AI decisions, not effective response

Explainable AI will be able to explain all choices and selections made - transparency

Where is the app going to be deployed?

A:

* How does AR relate to visualising AI in your experience (Julian)
* Big field of research in using AR to display data with more variables and dimensions to make it much easier to visualise.

Come up with MosCoW by ourselves

**Must Haves:**

**General**

* Intuitive, easy to use for business users -> foolproof
* Doesn’t require any data science knowledge
* ‘Prove’ that you can visualize an AI model
* Focus on Microsoft technologies unless it’s not possible
* End-to-end demonstration from data to model to explanation to visualisation
* Figure out what technologies and datasets we need
* < $100 a month in running costs
* Deployable in one area at least
* Workable visualization prototype

**Should Haves:**

**General**

* Be deployable in many workspaces => general functions rather than niche ones
* Relevant small data sets to test with
* Data filter function to filter out a specific type of decision for viewing.
* Test our findings on university classmates as a control group
* Source out industry standard sanitized data sets to actualize findings

**Could Haves:**

**General**

* Use AR to display data in 3 dimensions rather than 2, in order to increase the links between variables in our datasets that can be displayed simultaneously
* Interactive GUI for organizing and presenting data sets logically & neatly
* Create a website to demonstrate our findings, with interactive graphs for users of the general public to experiment with and learn from

**Would like to Have:**

**General**

* Applicable to any dataset and AI given
* Could provide its own analysis on the graph that it outputs
* Have a control group made up of CEO’s or project managers who are likely to use this to test

Deadline: next thursday

**Meeting minutes:**

Human computer interface project, have a think about how to interact with explainable AI, how we mathematically get an explanation of things, to show people in management who aren’t too technical, making explainable AI as accessible as possible. They don’t have an answer, they want us to research and propose technologies to suit the goal. Fergus suggests using Augmented Reality, AI models etc. Can request for datasets if required.

University determines timeline of the project. The time restriction is not on their side. Students should manage their own time.

Familiarise with cloud platform and cloud resources. Fergus will make a resource group for Azure, making a web app on MS Azure. Upload code on the web app etc. Cloud collaborative platform for working together.

For example, make a machine learning workspace and have access to more computing power on the cloud than you would have locally. Storage account to put data in if required. Cloud computing has a cost allocated to this, can check on cost analysis.

Budget of $100USD/month to spend on web apps. Google ‘azure web calculator’ to find out price of web apps.

Machine learning projects might use more than $100/month. Request for more monetary budget if needed.

In your report, use the numbers to show how much the project cost compared to the budget.

Request for hardware if needed, AI or VR let Fergus know. Holo lens 1 for loan.

Not sure if there’s any similar projects to what we’re aiming for.

Microsoft explainable AI is still in preview so everything is still in research phase. Good for us as we will be using leading edge technologies.

AR/VR or 3d modelling technologies if we’re interested.

Who are the users of the app? How would they use this technology?

Let’s use the government as an example, in the government department there will be a ML and DS team. Those people will be in charge of making models and decisions.

Example, school children will be assessed for whether they’re eligible for free lunch etc. Everyone was aware there was an algorithm that selected students for their GSCE/A levels grades. ML and DS team are only focused on making the algorithm, but not the final result of how the algorithm decides, which ultimately results in public outrage.

2 sides of users, people maintaining the models, and people like the government officials and journalists to understand the technologies involved. We’re focusing on the output of the ML models, to allow people like CEOs, managers to understand ML technologies.

Pick a niche to work on, an example to show that our prototype is working. Write down a business problem to explain it.

Codeless solution on Azure, drag and drop GUI for machine learning models.

Ml.azure.com

Designer - > Pipeline -> to reach ML GUI

Try to make it cross platform as alot of azure machines are running Linux as well.

Example clustering task for 15 dimension dataset, much easier to show it in 3d models than 2d models.

Aiming for a prototype, not expecting a polished version. Doesn’t matter if the model is static as long as we’re explaining what we’re doing with it.

Project is more about working visualisations, and explaining the transparency of the models.