DESIGN FOR AI

**Interview Guide**

**SCOPE**

* If a project is being proposed by a Business/ Client, are there any pre-checks before taking up the project? (if yes, what are they?)
* To decide whether ML/DL is the solution to a particular problem, what are the factors to be considered?

**DATA QUALITY**

Existing data sources

* How do you identify data sources?
* If tagged or labelled data is not readily available, what are the different strategies to acquire it?
* Are there any checks to qualify a data source to be used for training purposes? (if yes, what are they?)
* How do you identify which attributes from the acquired data can lead to accurate predictions?(Apart from statistical techniques)
* How do you determine the right sampling method? What are the decisive factors?
* (If stratified sampling is used) How are the properties selected to divide into strata?
* Are there any process in place to ensure that biases are not being introduced because of the training set being used? (or for diversification of data)
* Are there any manual tasks in the process of collecting, filtering and labelling data? (If yes what are they?)
* What are the major challenges with respect to data that you have observed in your previous projects?
* If the available data is not enough for reaching acceptable quality of predictions, what are the strategies to proceed?

Real-time data / User generated data

* How is working with real-time data or user generated data different from historical datasets?
* For ML systems depending on Real Time data, how is the initial training set acquired?
* Are there any challenges involved with using user generated data? (If yes, what are they?)
* Can we expect quality data being generated from users end in case of a freshly deployed/ immature ML application?
* What are the strategies used to filter user generated data?
* Are there any processes in place to ensure that biases are not being introduced from user inputs?

**USER EXPERIENCE**

New User

* Are users concerned in anyway to switch to an ML based system from a traditional application/service?
* Do you get any feedback from users/ clients on deployed products? What are the most common concerns?
* Were any of your previous clients/ stakeholders reluctant to accept AI/ML as a solution? (If yes why?)
* How do you communicate the capabilities of the system to a new user?
* Have clients/ users expressed the need to know how a prediction/output was arrived upon?
* Do you think communicating this is important?
* Are there any incidents were a human expert could have done a better job in comparison to an ML application?
* Are there incidents where outcomes of an AI system has to be verified by a human user? (If yes why?)

Error Handling

* If a user is not getting the required outcome from the system, what would you suggest him/her to do? ( Is this communicated to the user?)
* Can users always expect consistent outcomes/ accurate predictions from the system? (If yes, are the users confident about this? Else, How is this communicated to the user?
* Have user dropped off due to inaccurate predictions or errors in the early stages of deployment?
* Do you think that it is important for users to know why a prediction failed?

Conversational interfaces

* How do you communicate to users what can be asked of the bot and what cannot be?
* Are there any mechanisms to capture user inputs and use it to improve the bot? Is it done in real-time or intervals?
* To train a bot initially, how do you collect a set with sufficient variations in utterances?
* Are the different utterances manually written by the clients or collected from actual users?
* Which is the best example of a chatbot that you have come across? How is it different from your application and why?
* (Can a percentage be assigned for) how often a user is able to get the required outcome in the shortest possible conversation?
* What are the major concerns from clients in interacting with the bot?