September 25, 2020 Client Meeting

Meeting length: 1hr 5 mins

TODO:

- Make sure to time the meeting
- Introduce myself and team members.
    - Henter Yang, tech lead
    - Eloise Espel, project manager
    - Andy Cao, QA lead
- Setup a weekly meeting time to meet in person with the entire team and the client. Report that back to Bowen.
- Get required information:
    - Company Mailing Address
    - City & Postal Code
    - Telephone Number

Questions for Jeff:

1) How would you measure the success of the project? What is your goal for the project?
2) Where in the game does our project sit? In the library as a library module?
3) How do we get access to Minecraft Education?
4) Will we have access to the codebase? Or will we code it and plug it into the game, like an addon or mod.
5) Should we have different lessons for different grades, ie elementary, middle, and high school. Sounds like different lesson plans Maybe each group should select one year level.
6) How would the teacher interact with the program?
7) Do you want a prototype for the report? Surveys? Our own ideas? Survey high school teachers?
8) Are we using C++ and JSON
9) IP Agreement?

Start creating the requirements

Learn to code curriculum, learn to code arc, make code or scratch (block based coding to text based coding, to coding in IDE).
Started how to be a data scientist, ML and AI - He has meeting notes on the research that has already been done.
Start by teaching math, teach them platform so they don't have to do the math
Come up with ways to teach kids ML and AI - research elementary, middle school, high school (goal career in data science)

Collaboration (1 team primary move up, 1 team high school move down)

Approach review, set up roadmap with team liaison
Utility -> what you're learning is useful e.g. find a cat in a set of pictures no value (what is value for kids), everything in the game should have purpose and be useful
Just in time learning, if you need to learn something then you use it. How do you match to the student learning style (win Minecraft/explore eg. using ML to help them mine, survive the night) maybe identify monsters.

Project Malmo (Reinforcement learning with Minecraft)
Socratic arts (company that started AI lab in Northwestern) early pioneer in AI, the company wants to revolutionize the education industry. (K=Learning Minds book) -> learning starts with curiosity, matching the curriculum to what people care about.
NLP -> NPC

In notes look at styles of learning that work the best with Minecraft
Multiplayer, collaboration . E.g Classification, how groups of people work together to work with something.
Description (highest level of learning is teaching)

Google challenges for AI for kids
IBM beginners guide to AI
List of people within company they talked to
AI contest road generation (AI to build blocks)
UCIvine class about AI in Minecraft, Irvine efforts to teach AI using game
AzureCognitive Services (Advocate) -> Jeff says best approach, exemple (equality in AI, what happens when you train bad models), could train robot to protect villagers and attack zombies (personal note this sounds super cool). If you didn't kill model with darker skin model won't work

No access to the source code, extensions on Java (like people who create worlds), or getting source code access. Need a reason (1st well defined idea).
1st take world file and build lesson into it

1 goal that people care about (like sustainability), how to loop an dtest condition, AI sense, think and act = gather data, interpret data, do something

Hour of code -> demo world (could we do that with AI)

Value, can do something faster than if no AI or ML, less tedious

What's the learn AI/ML arc, how to introduce AI to a kid and create a learning progression to being an AI expert.
Where are we going to focus?
What in AI and ML will we focus on?
What features do you need in the platform to enable you to teach those concepts

What is the sample curriculum that allows you to teach the concept

Minecraft requirement
Should be fun and Minecrafty
Should be useful and relevant to what the kids care about

Create a Google Drive to share

From Jeff is liaison chat:
Here are what I had the basic things to think about
Basic critical questions for the teams
What is the "Learn AI" or "Learn ML" ARC? How do you introduce AI to kid and create a learning progression to being an AI expert?
Ai is a big area, what area are you going to focus on?
Where you are going to focus in the learning arc? (elementary, middle or high school)
What is the sample curriculum that teaches the concept?
What features do you need in the platform that enable you to teach these lessons? Examples: data collecting, data visualization, etc.

Important Minecraft Requirements
Engaging (Minecrafty)
Just-in-time learning based on player's need – player encounters a problem, then they learn how to solve it
Creative solutions - Not one right answer - multiple approaches and solutions
Inclusive - aligned around student's intrinsic motivations
Supports different interests (exploring, discovering, problem solving, creating, simulating the real world, etc)