## Project Development Plan

## Applying agile and iterative project management methods

Open Science for Improve diagnostics of Cancer through Artificial Intelligence and Digital Pathology.

**Milestones**:

1. Literature review
2. Collecting available open-source data
3. Training available algorithms
4. Develop the app and deploy the algorithm

*Breaking down my milestone number 3*: Training algorithms

***Table to help you break down your tasks (add more rows as needed)***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Different stages of this milestone (start with a MVP) | Tasks Broken down in smaller chunks | Can I break them down any further? | Expected Timeline for each task | Resources needed | Who can do this task |
| Step 1 Choose the dataset | Download the available dataset and save |  | 6 hours | Internet |  |
| Step 2: Prepare dataset for training | Preparing dataset for training will involve assigning paths and creating categories(labels), resizing our images. |  | 1 day | Writing python code |  |
| Step 3: Create training data and shuffle the dataset | will contain image pixel values and the index at which the image in the CATEGORIES list. |  | 1 day | Expand the step-2 code |  |
| Step 4: Assigning Labels and Features | Normalising X and converting labels to categorical data.  Split X and Y for use in CNN | 2 | 1 day | Expand Step-3 code |  |
| Step 5: Define, compile and train the CNN Model |  |  | 1 week | Expand Step-4 code |  |
| Step 6: Accuracy and Score of model | Improving the model |  | 1 week | Modify hyperparameters in the code |  |
| Step 7: Collecting our own data |  |  | 1 month |  |  |
| Step 8: Transfer learning on new data | Applying the model |  | 1 week | Use previous pre-trained model |  |