



Progress Review Presentation

Nexus



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Members

- Supervisor : Ms. Kushani Bandara
 - Group : 21
 - Cluster : 21.1
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- MJM.Amajith 721434768 (Back-end Developer)
 - MN.Fathima Rafaha 121428697 (UI/UX Developer)
 - MMZ. Zahra 221445832 (Front-end Developer)
 - MHA. Ahmed 321422851 (Model Developer)



Acute lymphoblastic leukemia (ALL) is a type of cancer that affects the blood and bone marrow. In general diagnosis of ALL is typically made by a combination of blood tests and bone marrow biopsies. However, these tests can be difficult to interpret, and there is a risk of false positives and false negatives.



The project aims to deliver medical practitioners with an AI agent that can recognize cells and classify them as either leukemic or regular cells based on learned patterns and characteristics.



Functional Requirements

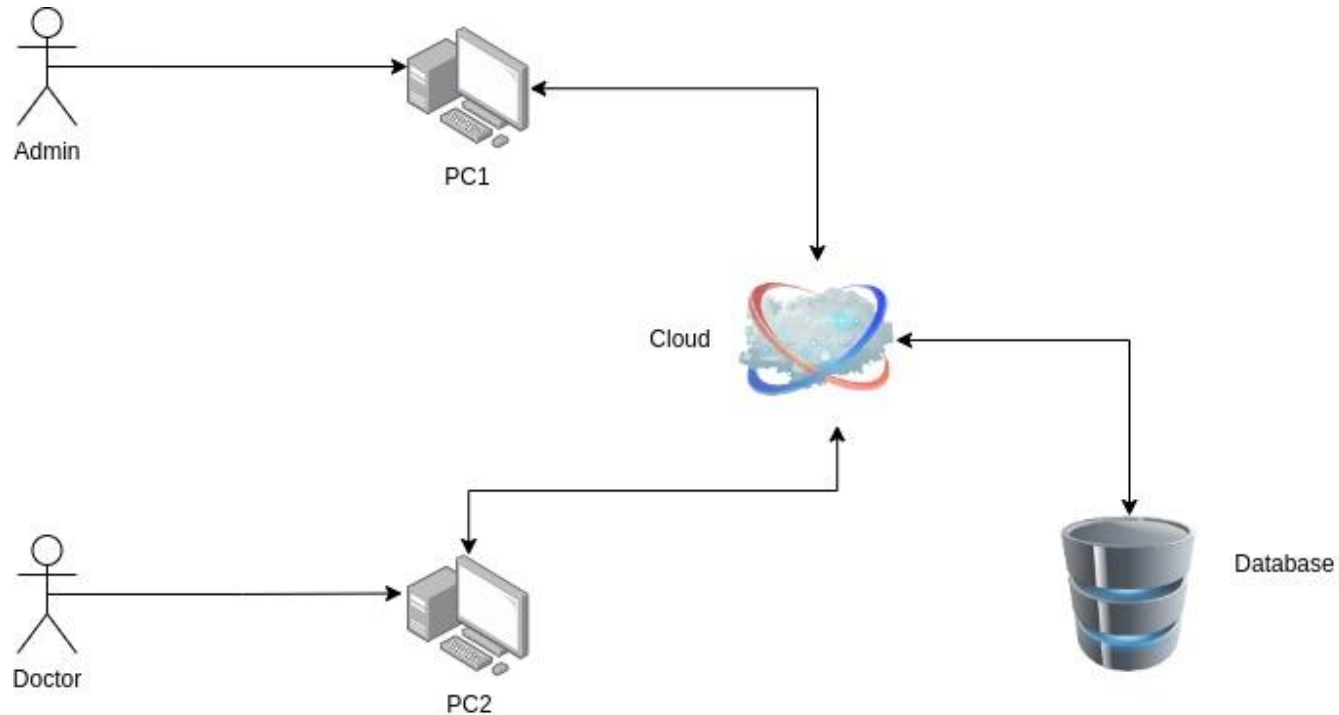
- Image Input and Processing
- Convolutional Neural Network (CNN) Analysis
- Diagnostic Reporting
- User Authentication
- Historical Diagnosis and Clinical Details
- User Interface



Non-functional Requirements

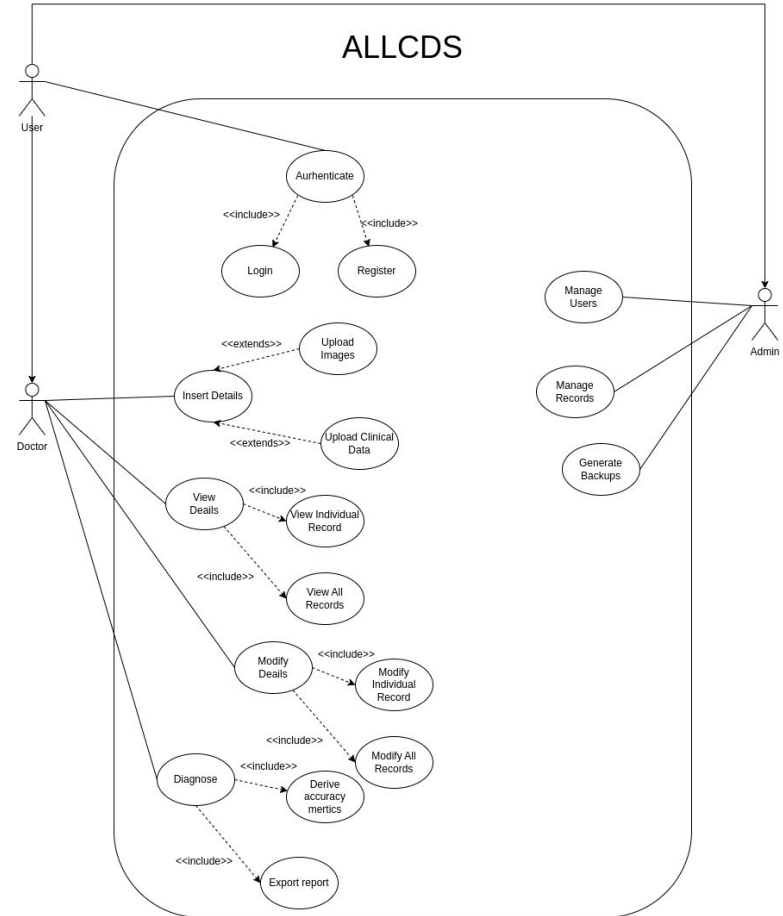
- Should consume favourable amount resources in computation.
- Should be able to handle large volume of images and classifications simultaneously.
- Must achieve a high accuracy rate in differentiating between pathological and regular cells.
- Should maintain consistency in classification results for the same input image over multiple runs
- Must ensure the confidentiality and integrity of patient data.
- Should be scalable to accommodate future enhancements and changes

System Architecture Diagram

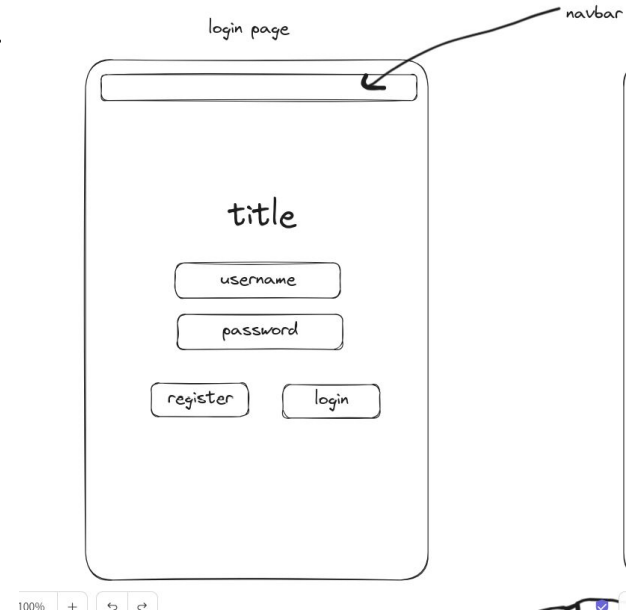
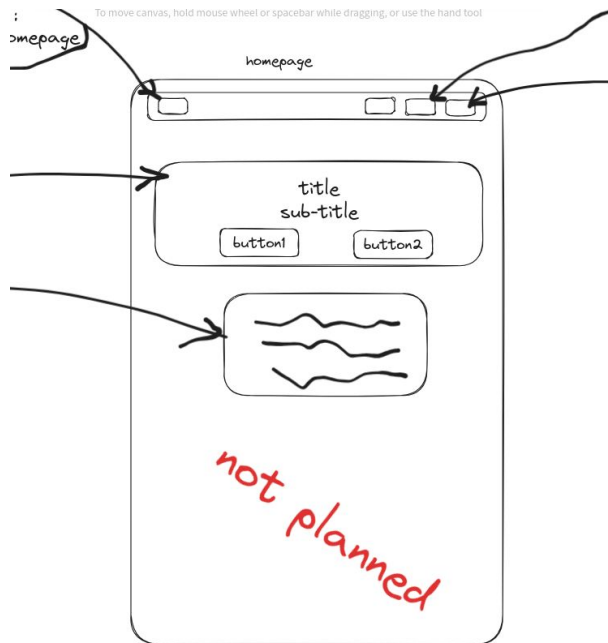
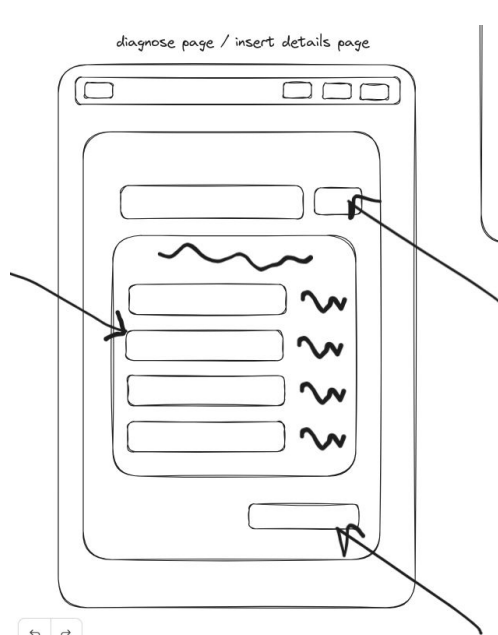




Use-case Diagram



Wireframes of UI design





Progress of the project

- Finalized SRS Report (Done)
- Finalized PPR and PPP (Done)
- Git & Project Governance Tool (Created)
- Initial Implementation (Done)
- Functional Requirements Implementation (Pending)
- Non-functional Requirements Implementation (Pending)
- Testing & Evaluation (Pending)
- Final Report & Presentation (Pending)

Trello

Workspaces

Recent

Starred

Templates

Create

Search

AA

This board is set to public. Board admins can change its visibility setting at any time. [Learn more here](#)

Requirement Gathering

Public

Board

Power-Ups

Automation

Filter

AA ZZ KB MA S

Share

To Do

Model : Data Preprocessing

Back-end : Initial Setup

Front-End : Initial Setup

+ Add a card

Doing

CMMI : Records

Jul 17 1 1/2

SRS : Finalization

Jul 17

PPR: Preparation

Jul 17

PPP: Preparation

Jul 17

Git : Initial Setup

2/3

+ Add a card

Done

Model: Planning

4/4

SRS : Preparation

6/6

+ Add a card

Archive

Git : Create repository

3/3

SRS : Planning

3/3

+ Add a card


Discussion

Docker???

MySQL vs MongoDB

+ Add a card

+ Add another list



Meeting information			
Meeting Date/Time	22/06/2023		
Participants	Fathima Rafaha Adheeb Ahmed Zeeshan Zahra		
Estimated Time	1 hour	Actual Time	40 minutes
Special Notes	Amaajith was absent		
Call/Location Information	Zoom		
Supported Documents	Null		

Agenda:

- Appointment with supervisor
- Supervisors approval for the project proposal
- Discussion about Project management and progress tracking tool

Notes/Clarifications:

- Git will be used for project management
- Trello will be used to track the progress of the project

Meeting Minutes:

- Scheduled a meeting with the supervisor for next week.
- Supervisor approved the project proposal.
- Agreed to use Git for project management.
- Set up a Git repository and shared access with the team.
- Decided to track progress using Trello.
- Assigned tasks and deadlines to team members in Trello.
- Will update the Trello board regularly to monitor progress

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Thlurte SRS: finalized draft	7aceff3 5 days ago	10 commits
CMMI meetings	added CMMI minutes	3 weeks ago
Project proposal	added project proposal	last week
SRS	SRS: finalized draft	5 days ago
.gitignore	initial settings	last week
README.md	Update README.md	last week
requirements.txt	initial settings	last week

README.md

Nexus

AI agent for Acute lymphocytic leukemia diagnosis (ALL) with django and tensorflow.

About

AI agent for Acute lymphocytic leukemia diagnosis with django and tensorflow

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Releases

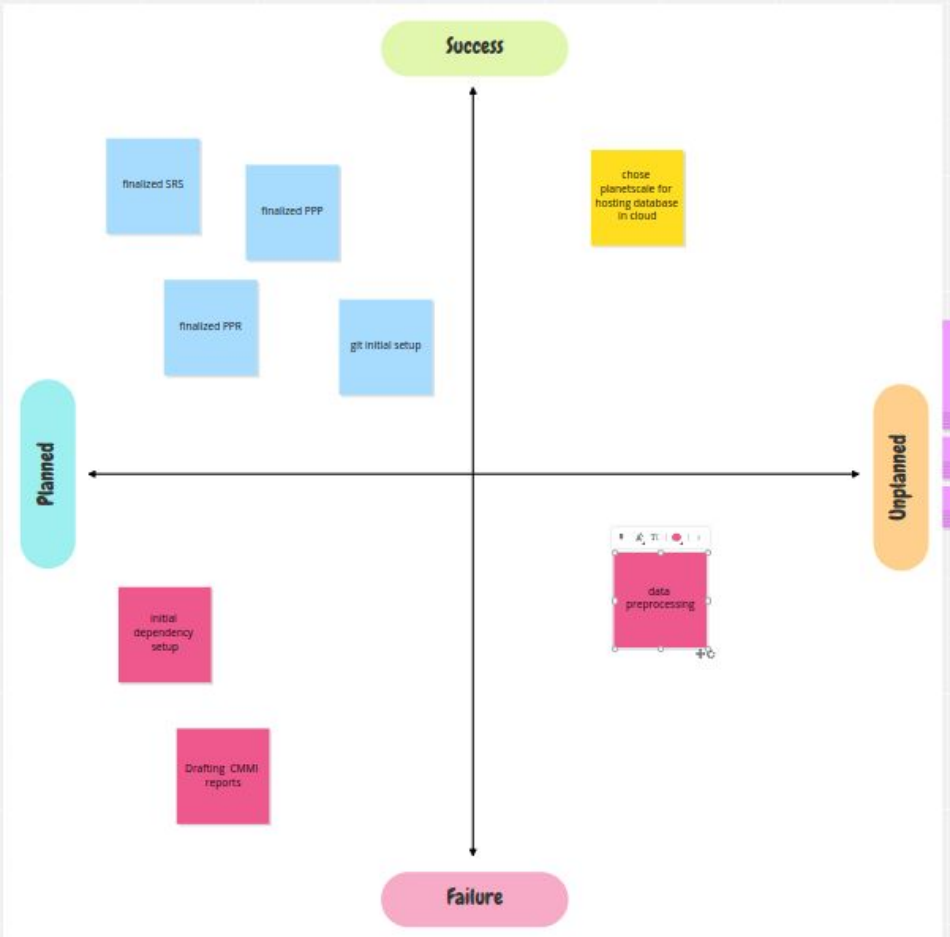
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Packages

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Project limitations and Problems encounter

- Data preprocessing consumes too much time.
- Integrating model with backend is a complex process.
- Model consumes more computing resources and performance is very slow