



# Progress Review Presentation

Nexus



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# Members

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



# Introduction

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.



# Objectives

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

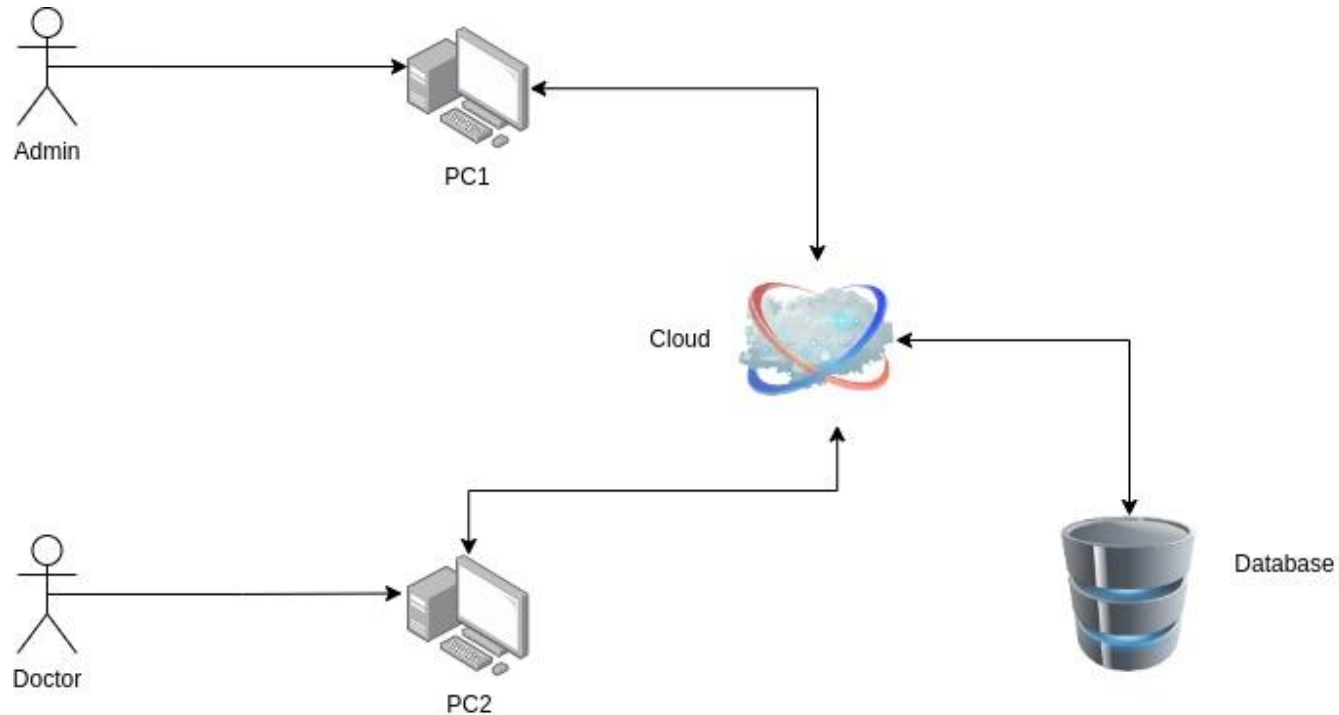
- Image Input and Processing
- Convolutional Neural Network (CNN) Analysis
- Diagnostic Reporting
- User Authentication
- Historical Diagnosis and Clinical Details
- User Interface



# Non-functional Requirements

- Performance (processing time should be less than 10 seconds ,should support concurrent analysis of at least 100 images)
- Accuracy (minimum accuracy requirement is set at 90%,should maintain consistency in classification results for the same input image over multiple runs(10). )
- Scalability (should be scalable to accommodate future enhancements and changes.)
- Security (must ensure the confidentiality and integrity of patient data by implementing appropriate security measures such as encryption and access controls to protect sensitive information)

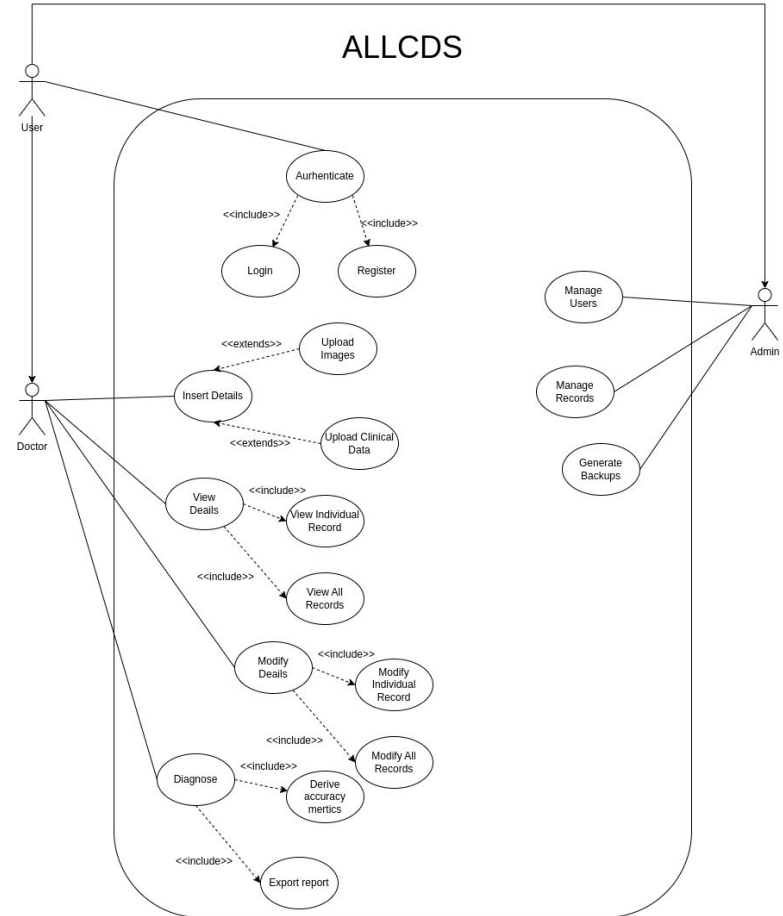
# System Architecture Diagram



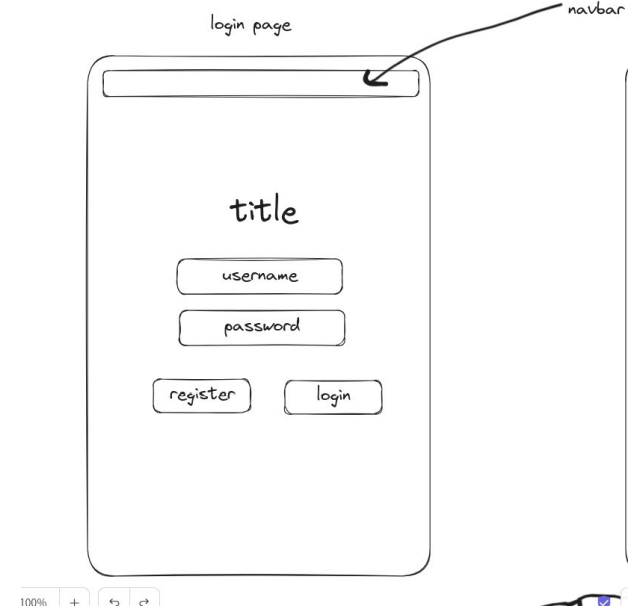
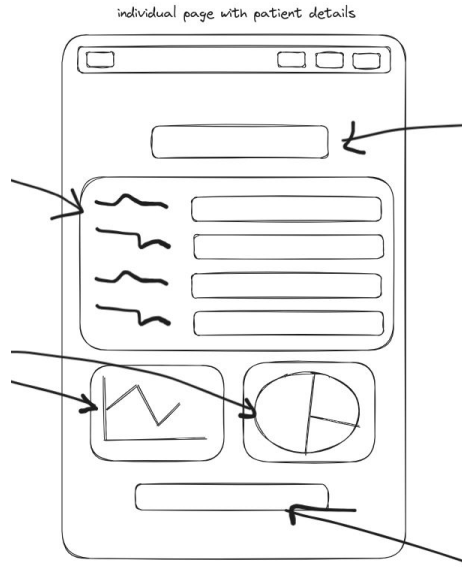
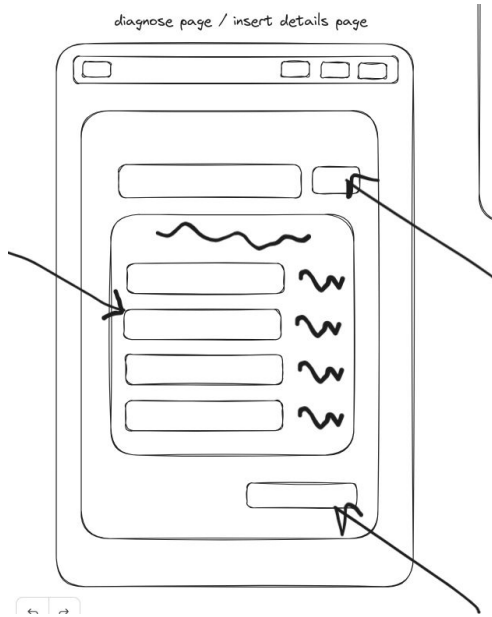




# Use-case Diagram



# Wireframes of UI design





# Progress of the project

- Planning and Requirements
  - Gather and prioritize user requirements (Completed)
    - Medium : Questionnaire and Interview
  - Create and maintain information about user classes (Completed)
  - Plan releases and determine the work for each sprint. (specified in Trello)
- Design
  - Create high-level architectural designs and detailed design solutions for user classes (completed)
- Development
  - Implement the designed features or functionalities through coding. (WIP)
    - Implement frontend modules (WIP)
    - Implement backend modules (WIP)
    - Integrate database (completed)
    - Design and integrate the cnn model.(WIP)
- Testing (TBA)
- Deployment and Evaluation (TBA)

# Project Governance Tool

The screenshot displays a Trello board interface for a project titled "Requirement Gathering". The board is set to public and is managed by board admins. The workflow is organized into five columns: "To Do", "Doing", "Done", "Archive", and "Discussion".

- To Do:** Contains three cards: "Model : Data Preprocessing", "Back-end : Initial Setup", and "Front-End : Initial Setup".
- Doing:** Contains four cards: "CMMI : Records" (due Jul 17, 1 comment, 1/2 progress), "SRS : Finalization" (due Jul 17, 0/0 progress), "PPR : Preparation" (due Jul 17, 0/0 progress), and "PPP : Preparation" (due Jul 17, 0/0 progress).
- Done:** Contains two cards: "Model: Planning" (4/4 progress) and "SRS : Preparation" (6/6 progress). Both are marked with a green checkmark.
- Archive:** Contains two cards: "Git : Create repository" (3/3 progress) and "SRS : Planning" (3/3 progress). Both are marked with a green checkmark.
- Discussion:** Contains one card: "MySQL vs MongoDB" (marked with a yellow warning icon).

The board also features a search bar, a "Share" button, and a "Filter" dropdown. A "Power-Ups" section is visible on the right side of the board.

# CMMI Meeting Minutes

Meeting Information			
Meeting Date/Time	22/06/2023		
Participants	Fadhima Rafaha Adheeb Ahmed Zoonath 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

Meeting-Heading			
Meeting Information			
Meeting Date/Time	2023-07-17		
Participants	All		
Estimated Time	15 Mins	Actual Time	25 Mins
Special Notes	Teams		
Call/Location Information	Teams		
Supported Documents	None		

**Agenda:**

- Documenting gathered requirements
- Preparing SRS
- Preparing PPR
- Preparing PPP

**Notes/Clarifications:**

**Meeting Minutes:**

- Amaajith documented all requirements from the source document
- Rafaha prepared PPP and PPR
- Zahra and amaajith outlined and prepared SRS

Action Items:	
Action Item	Decision made by

Nexus	2023-07-20
Organization name	<Date>

Meeting-Heading			
Meeting Information			
Meeting Date/Time	2023-06-27		
Participants	All		
Estimated Time	20 Mins	Actual Time	25 Mins
Special Notes	Teams		
Call/Location Information	Teams		
Supported Documents	None		

**Agenda:**

- Planning Requirement Gathering
- Choosing SDLC methodology
- Choosing right database system

**Notes/Clarifications:**

**Meeting Minutes:**

- Amaajith emphasized the benefits of Agile Development
- Zahra outlined a proper plan for requirement gathering
- Rafaha demonstrated the seamless integration of mysql with django

Action Items:	
Action Item	Decision made by
Chose Agile methodology	Unanimous
Chose MySQL	Unanimous
Identified Stakeholders	Unanimous

Organization name	<Date>
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Meeting-Heading			
Meeting Information			
Meeting Date/Time	2023-07-20		
Participants	All		
Estimated Time	60 Mins	Actual Time	60 Mins
Special Notes	Teams		
Call/location information	Teams		
Supporting Documents	None		
<b>Agenda:</b>			
Checking a right model			
Preprocessing the dataset			
Finalizing reports			
<b>Notes/Clarifications:</b>			
<b>Meeting Minutes:</b>			
Amaajith and Zahra finalized SRS and PPR			
Rafaha finalized PPP			
Adheeb started preprocessing the dataset and found a scalable model for training and evaluation			
<b>Action Items:</b>			
<b>Action Item</b>		<b>Decision made by</b>	

# Github

Thlurte / Nexus

Search Type to search | + -

<> Code Issues Pull requests Actions Projects Wiki Security Insights Settings

Nexus Public

Pin Unwatch Fork Star

main 1 branch 0 tags

Go to file Add file Code

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

Readme

Activity

0 stars

2 watching

0 forks

Releases

No releases published  
Create a new release

Packages

No packages published  
Publish your first package

Contributors 4

Thlurte

ZeenathZahra Zeenath Zahra

rafahamf Rafaha Nazeer

mohamedamajith MJM.Amajith

# Monthly Retrospective

Monthly Sprint - Retrospective

As a team you MUST provide FIVE retrospectives at the end of each month.

454545678 (your & team's account)

Team owner

Feedback required question

Are you committed for the Group?

Yes

No

Add your Registration # \*

0123456789

Member 1 Registration # \*

0123456789

Member 2 Registration # \*

0123456789

Member 3 Registration # \*

0123456789

Add your Team Cluster # \*

Ex: 1.1

01.1

Add your Team Group # \*

Ex: 1.1

01

Add your Supervisor Name \*

Mr. Student Business

For what month you are going to fill your Retrospective?

JAN

What went well in last four weeks?

Describe a success of something you have done within last four weeks with respect to your project. You can only copy these things in your project.

are identified for positive change in the administration

What could be improved?

Whether something you have done, but could be done better.

Can improve the process of collecting registrations

What went badly?

Whether something you have done badly which you should not continue.

Coming up with the schedule details the client provided us with.

Submit

Clear form

Monthly Sprint - Retrospective

As a team you MUST provide FIVE retrospectives at the end of each month.

454545678 (your & team's account)

Team owner

Feedback required question

Are you committed for the Group?

Yes

No

Add your Registration # \*

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Member 3 Registration # \*

0123456789

Add your Team Cluster # \*

Ex: 1.1

01.1

Add your Team Group # \*

Ex: 1.1

01

Add your Supervisor Name \*

Mr. Student Business

For what month you are going to fill your Retrospective?

JAN

What went well in last four weeks?

Describe a success of something you have done within last four weeks with respect to your project. You can only copy these things in your project.

We gathered a significant number of new products

What could be improved?

Whether something you have done, but could be done better.

Can improve the process of organizing each registered new service

What went badly?

Whether something you have done badly which you should not continue.

Don't introduce innovative products if they

Submit

Clear form

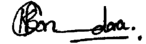


## Project limitations and Problems encounter

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

while developing our application for acute lymphoblastic leukemia diagnosis, we encountered challenges related to data preprocessing time, model integration, and computing resource consumption.

Supervisor's Approval:



Ms. Kushani Bandara