

Assignment - 1

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Step 0 Select project.

→ Project is SMART NOTES - AI

↳ Smart clinical note capturing sim for both structured & unstructured format of clinical notes

Step 1 : Scope of Project & Objectives

1.1 Objective

- Perform Section / Label Identification for each sentence / "blob" of text
- Integrate into IP-records & OP-records.
- UI for clinical note capturing
- Integrate into CDSS (Pre-existing AHIS)

1.2 Project authority

→ Amrita technologies

1.3 Stake Holders

- Amrita tech.
- Amrita Hospitals
- Myself

Step 2 : Identity Project Infra

2.1 Relationship b/w Project & Strategic Planning

→ Order of related items:

Section Identification → Sentence to label Mapping to medical → UI for note capturing

→ Framework: basic AI Frameworks like TensorFlow, Amazon, ML, PyTorch

→ Hardware: GPU Servers.

Step 3 = Analyze Project characteristics

3.1 Product Driven

3.2 Critical infra, cannot/shoudn't. (ashpr)

Go down

3.3 Computationally expensive (for full fledged hospitals like AIMS)

3.4 methodology: Agile.

Step-4 :- Identify Product Product & activities

(A) NotesServer: for managing clinical notes of both IP & OR Patients.

(B) Management server: for modeling running + monitoring

* Phase 1: Design

⇒ architecture of notes capturing & segregation (IN SERVER)

⇒ test different visualization software for capturing notes (Physician) use

* Phase-2: Performance analysis and testing

⇒ Automated deployment into AIMS Cloud/Server depending on Hospital security Laws

⇒ Analyze Performance with demo/Pre-existing CDSS reports.

⇒ deploy outline / transfer learning module at Physicians end.

Step-5 : Estimate effort for each task

⇒ team of 3 will be doing it in a span of 3-4 months

Step 6 : Identify Risk Activity.

⇒ mismatch b/w similar labels

⇒ " " in Patient records

Step-7 Allocate resources

⇒ Assigned 3 members to team

⇒ \$600 worth hardware & cloud servers

Step-8 : Review / Publish Plan.

⇒ Plan was Presented to team, mentors & few Stakeholders

⇒ Suggests some changes in delivery

⇒ changes being implemented.

Step-9 : Execute Project

⇒ Project Completion underway to Execution.