Stay Ahead

BANNARI AMMAN
INSTITUTE OF TECHNOLOGY
An Autonomous Institution, Affiliated to Anna University,
Approved by AICTE, Accredited by NAAC with 'A+' Grade

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Seat No: 311

Project ID: 31

Project title: Apex System

Technical Components

Component Tech Stack

Backend: Node.js

Frontend: Angular

Database: MongoDB

API: Express.js

Phase Notes

Stage 1 Planning and Requirement gathering

Stage 2 Design and Prototyping Stage 3 DB Designing

Stage 4 Backend Implementation Stage 5 Testing & Implementation

Software Requirement Specification (SRS) for Apex Approval

1.Introduction

1.1Purpose

The purpose of this document is to remove the time consuming paper process and digitize the Apex process,which can help faculties to save time and effort and make sure the the process is smooth.It is done using the MEAN (MangoDB,Express.js,Angular,Node.js) stack.

1.2 Scope

The project will implement two primary functionalities,
Request Submission:Ability for users(Faculty) to submit requests for approval. These requests could include various types of documents, such as expense reports, purchase orders, or project proposals.
Approvals and Rejections:Options to approve or reject requests, with the ability to add comments.

1.3 Definitions,Acronyms, and Abbreviations

SRS:Software Requirement Specification.
MEAN:MangoDB,Express.js,Angular,Node.js.

1.4 External Reference

No external reference is needed for this document.

2.Overall Description

2.1 Product Perspective.

The Project Management Portal will be a standalone web-based application that interfaces with a MongoDB database for data storage and retrieval. It will provide a user-friendly interface for faculties to interact with the system and Make their request.

2.2 Product Features

The main features of the web application include
1.Faculty login.
2.Request Submission Form.
3.Approvals and Rejection details.

2.3 User Classes and Characteristics

Users of the system include,
Faculty: Primary users who will log in to request and view their request process.
Admin (office of the IQAC):System administrator responsible for managing Faculty records and Approve process details.
Head/coordinator/principle:They are the people who check the request and approve it after verification.

2.4 Operating Environment

The system will operate on standard web browsers (Chrome, Firefox, Safari) and require an internet connection to access the MongoDB database hosted on a server.

2.5 Assumptions and Dependencies

Assumption: Faculties will have valid email addresses for authentication.
Dependency: Availability of MongoDB database for storing student and project data.

3. Specific requirements.

3.1 External Interface Requirements

3.1.1 User Interfaces

Login Page: User login form for email authentication.
Approval Form: Form for approval of Money.

3.1.2 Hardware Interfaces

No specific hardware interfaces are required for this web-based application.

3.1.3 Software Interfaces

Backend: Express.js framework for API development.
Database: MongoDB for data storage and retrieval.

3.1.4 Communication Interfaces

HTTP/HTTPS protocols for client-server communication.
3.2 Functional Requirements

3.2.1 Request Submission:

Users should be able to submit requests for approval, providing necessary details and attaching relevant documents.

3.2.2 Approvals and Rejections:

Approvers should be able to review request details. Approvers should have the ability to approve or reject requests, with the option to add comments or provide justification for their decision.

3.3 Non-Functional Requirements

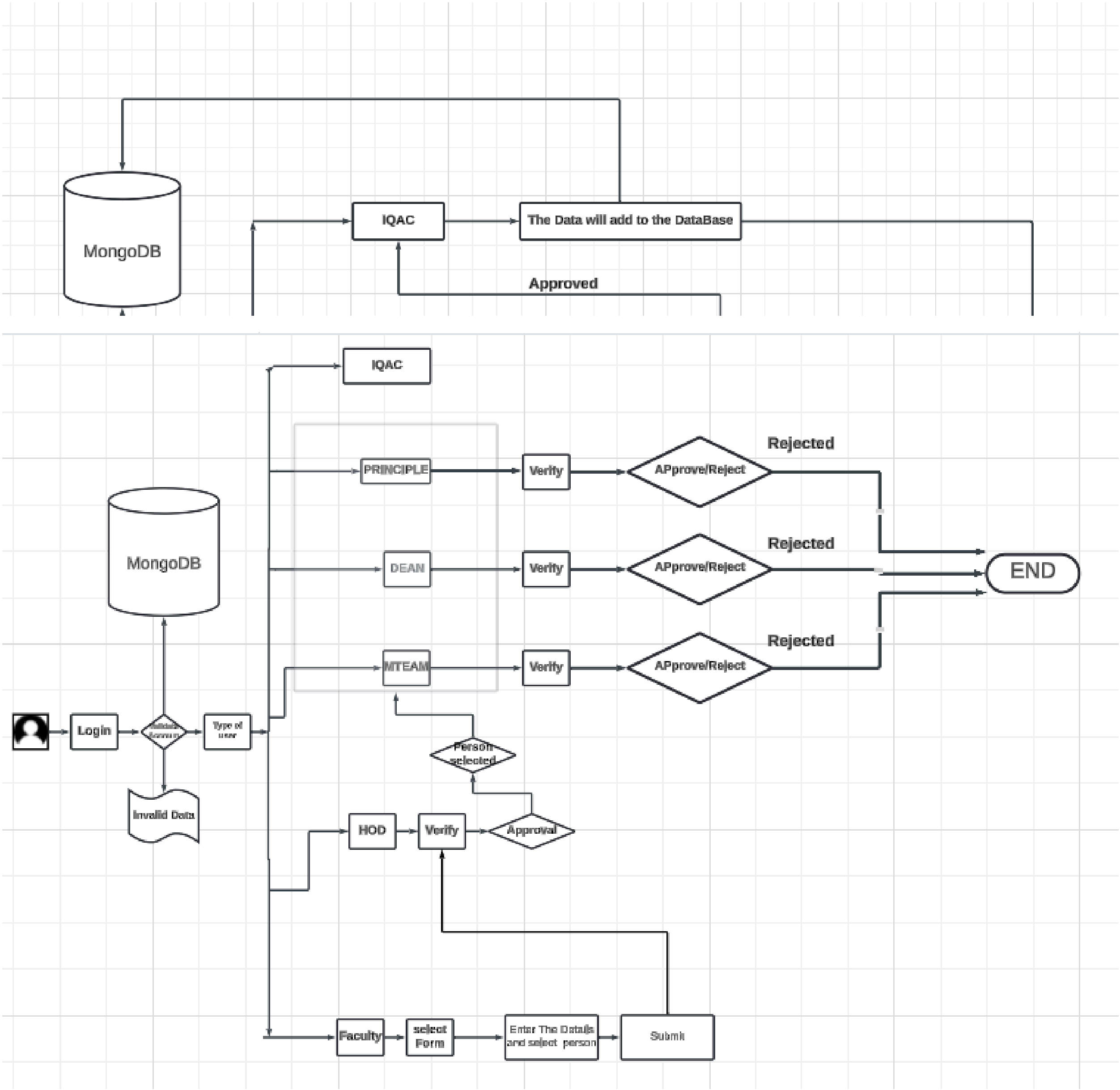
3.3.1 Performance System should handle concurrent user interactions efficiently. The website should be responsive.

3.3.2 Security Implement secure authentication mechanism using email credentials. Ensure data privacy and protection of faculty records.

3.3.3 Usability User interfaces should be intuitive and accessible to all users. Provide clear feedback and error messages for user interactions.

3.4 Data Requirements faculty records, expense details, and availability status will be stored in a MongoDB database. Excel file parsing will be used to extract data for dashboard display

4.Flowchart


MongoDB
IQAC
The Data will add to the DataBase
Approved
IQAC
PRINCIPLE
Verify
APprove/Reject
Rejected
MongoDB
DEAN
Verify
APprove/Reject
Rejected
END
MTEAM
Verify
APprove/Reject
Rejected
Login
Validate Account
Type of user
Person selected
Invalid Data
HOD
Verify
Approval
Faculty
select Form
Enter The Datails and select person
Submit