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A Tool for tracking and managing the Month wise Minor Enhancement Tasks through a proper workflow

Minor Enhancement Tracking Tool

Technical Documentation

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## Introduction

## Background and Objective of this Application

Currently NSDC IT team is tracking and monitoring the Monthly Minor Enhancements over mails and excel sheet. Also business is raising all the requests for enhancements through emails in different formats which not easy to track and manage. To overcome this situation and make the process more efficient and robust with a proper workflow of Request – Evaluate – Approval the NSDC IT team is now developing an application namely **Minor Enhancement Tracking** (MET) tool.

## Stakeholders

This tool has majorly 3 types of Stakeholders:

* **Business Users / Requester**: The Business users / Requesters will be the one who will raise a request on MET for a minor enhancements in any of the modules and will submit their detailed requirements for the enhancement as well through a UI interface on MET. Also the business user will get notification of deployment of the enhancement through MET.
* **Development Team:**  The Development team will be the one to evaluate the requirement and provide a tentative efforts for the same on MET. Also post approval of the final efforts the development team will be responsible for the development and deployment of the enhancement and uploading the Release Note with the date of moving this to production on MET.
* **IT Team:**  The IT team will be reviewing the effort estimation provided by the development team and post discussion and negotiations the IT team with enter the final efforts estimation for an enhancement and will give the go ahead to the development team. IT team will be able to generate multiple reports such as below:
  + Monthly Total Minor Enhancement efforts
  + Monthly Department wise Minor Enhancement efforts
  + Monthly Module wise Minor Enhancement efforts
  + Time-lag in providing Effort estimation
  + Time-lag in approving Effort estimation
  + Time-lag in development post approval of Efforts

## Technical Stack: MEAN Stack

MEAN (MongoDB, Express.js, AngularJS (or Angular), and Node.js) is a free and open-source JavaScript software stack for building dynamic web sites and web applications.

Because all components of the MEAN stack support programs that are written in JavaScript, MEAN applications can be written in one language for both server-side and client-side execution environments.

## MongoDB:

MongoDB is a NoSQL database program that uses JSON-like BSON (binary JSON) documents with schema. The role of the database in the MEAN stack is very commonly filled by MongoDB because its use of JSON-like documents for interacting with data as opposed to the row/column model allows it to integrate well with the other (JavaScript-based) components of the stack.

## Express.js:

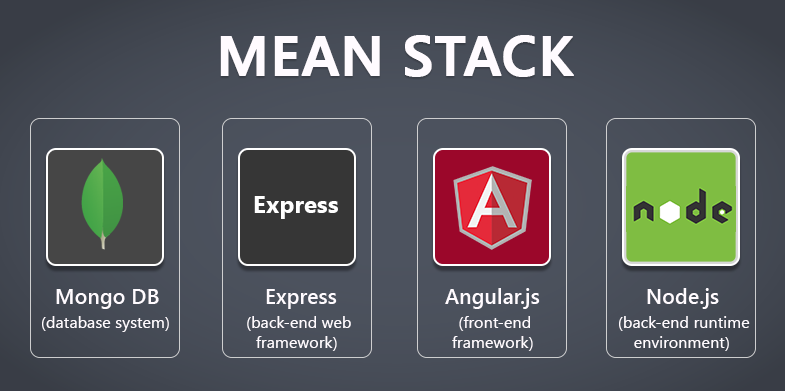
Express.js (also referred to as Express) is a modular web application framework package for Node.js. Whilst Express is capable of acting as an internet-facing web server, even supporting SSL/TLS out of the box, it is often used in conjunction with a reverse proxy such as NGINX or Apache for performance reasons.

## Angular.js:

Typically data is fetched using Ajax techniques and rendered in the browser on the client-side by a client-side application framework, however as the stack is commonly entirely JavaScript-based, in some implementations of the stack, server-side rendering where the rendering of the initial page can be offloaded to a server is used so that the initial data can be prefetched before it is loaded in the user's browser.

## Node.js:

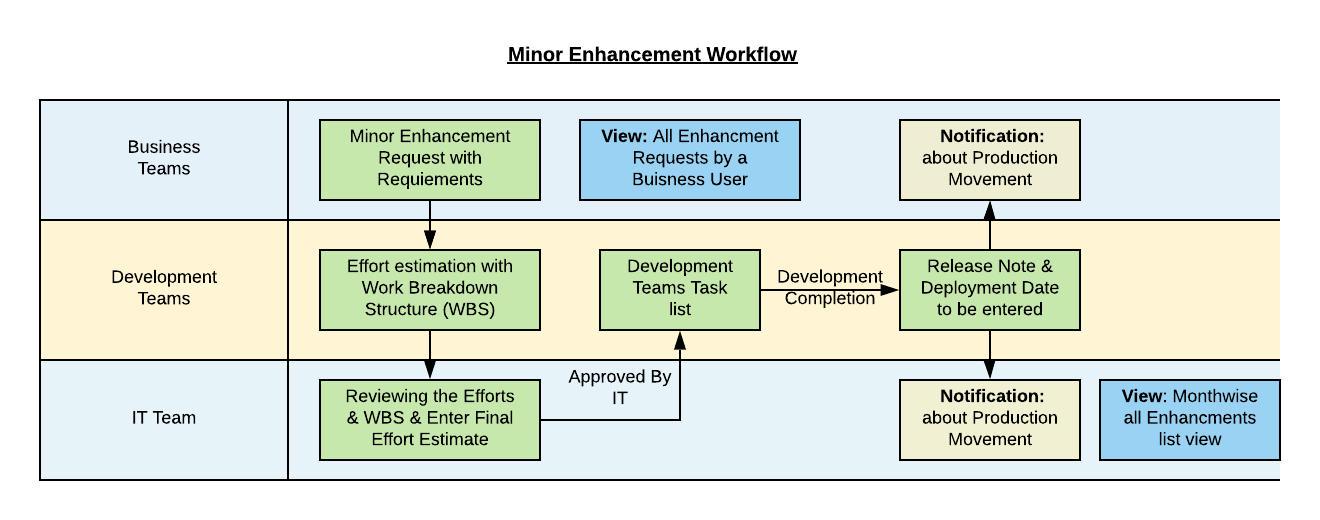
Node.js is the application runtime that the MEAN stack runs on. The use of Node.js which is said to represent a "JavaScript Everywhere" paradigmis integral to the MEAN stack which relies on that concept.



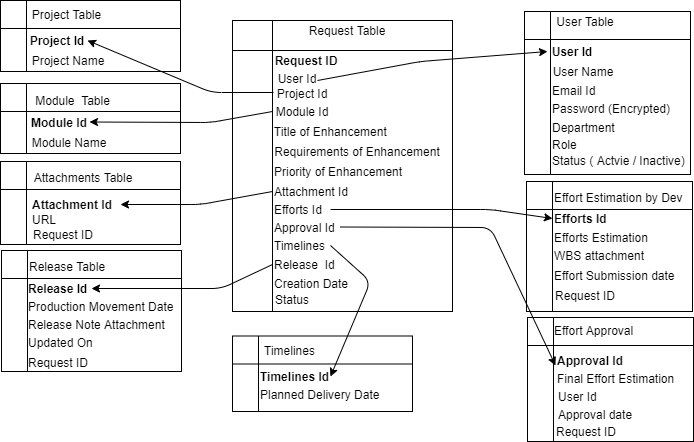
## Requirements of the Application

## Brief Description

## Process Flow



## E-R Diagram



## Wireframes