

# Software Requirement Specifications

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# Title - Online Invoice Generating & Tracking System

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Category - Web Application

# Purpose



A full stack invoicing application made using the MERN stack (MongoDB, Express, React & Nodejs). The Purpose of this project is for freelancers and small businesses, but can be used for almost any type of business need. With this application, you can send beautiful invoices, receipts, estimates, quotes, bills etc to your clients

# Scope

It will integrate the benefits of a virtual Invoice with the convenience of payment tracking. The Shop Owner can keep a track of the payments that are pending, Invoice they have generated, Due date for the payments. The amount of businesses, freelancers is huge, And they require such facilities to track daily transactions. The End user could inturn use this invoice app to easily file taxes.

# 1. Introduction

1.1 Introduction contain the following sub categories :

Existing System:

The present system is a manual system or a semi-automated system. Manual system involves paper work in the form of maintaining various files and manuals. Maintaining critical information in the files and manuals is full of risk and a tedious process.

# Manual System contains following disadvantages

- 1) Tampering of Physical Invoices happens a lot, Primary example is the government bond issuance.
- 2) Time consuming, Higher chance of errors
- 3) Paper degradation due to weather or rat infestation
- 4) Difficulty in Monitoring
- 5) Make a separate invoice book/paper which has to be stored safely inorder to keep up with the payments.
- 6) Earlier Online applications didn't have proper ecosystem to track particular users.
- 7) No proper payment tracking process is available.
- 8) People often skip due dates and have to be reminded constantly.

## 2. Proposed System

All the payment related issues will be solve in this one stop Application. This project contains 1 portal.

- 1) User Registration -> Every user can register themselves using a unique Login ID and password.
- 2) Invoice Making -> Every User can make an Invoice
- 3) Send invoices, receipts, estimates, quotations and bills via email
- 4) Generate and send/download pdf invoices, receipts, estimates, quotations and bills via email
- 5) Due Date -> Every Invoice will have a certain Due date
- 6) Track Payment History -> A dashboard will contain all the payments that have been done.

7) Track Invoices generated -> Tracks all the Invoices that have been paid/yet to be paid.

8) Customers -> Add/delete customers

9) Customer Tracking -> Make an Invoice for unique Customers



## 2.1) Advantages for the End user

- 1) No Chance of Tampering
- 2) Clean and Aesthetic looking UI/UX for Invoices.
- 3) Save costs: When payments are made on time, penalties are avoided and sometimes-even discounts are given by suppliers for those who pay in time regularly.
- 4) Reduces Or Eliminates Errors: When data is captured, the possibility of errors becomes minimal. Also, the need for constant checking and monitoring of errors gets eliminated.
- 5) Keep Track of Completely/Partial payments made.
- 6) Increases Efficiency: When less time is spent on data entry, cross-referencing, getting approvals, and filing Taxes.

## 3) Functional Requirements.

The different modules present in this system are given below:

### **Login System Module**

#### 4.1.1 Description and Priority

The login system consists of two parts. The first one is “signing page” in which the user creates his username and password for his account and these details are stored in the database. Then comes the login page. Here the user enters his username and password which he created in the signup process. And if this data matches with the data present in the database, then the user is successfully logged in. Or they could simply use the google authenticator via email.

# Create Custom Invoice

A ready-made, good looking template will be provided as an Invoice which would have blanks to be filled.

For entering a new customer, User has to provide details like ->

i) Name

ii) Email, Phone, Address

Allows the user:

1) to set the due date

2) set a custom currency and custom tax rate applied on top of it

3) Fill fields like Amount, discount, progress etc.

4) Download the invoice as a pdf.

# Customer Tracking

Set Invoices to that particular customer so that it could make tracking easier. Separate page provided to track such kinds of things easily.

## Dashboard

With a clean admin dashboard, displaying all the user statistics. Allows you to keep track of everything basically. With functions like, Payment history, All the payment received, Total Invoices made, Invoices Paid Partially/Completely, and finally Overdue Invoices.

Automatic Status change when payment record is added. Keep track of all the payment records.

# Non-functional Requirements

- 1) Security – it is important to specify the level of security that should be met such
- 2) Accessibility – ensuring that the platform meets the basic accessibility standards throughout
- 3) Privacy – meeting basic requirements for GDPR.
- 4) Documentation and Usability – ensuring that the platform is sufficiently documented and easy to understand with minimal or no training
- 5) Extensibility – ensuring that the platform is extended in such a way to make future development feasible

Data integrity and retention – defining how long data should be stored and reviewable

Testing – defining how unit testing will be built into the solution

Compatibility – ensuring that the platform can be easily integrated with 3rd party systems

Infrastructure – defining the performance thresholds (CPU and memory usage)

# User Constraints and Characteristics

Constraints ->

Multiple login	Multiple users can login at the same time
Inactivity	The system automatically logs out when there is inactivity for a particular amount of time.
Uniqueness	Every user should have a unique email to login
Password	The password set should be a minimum of 6 characters including capitals, numbers and special characters.

## Characteristics ->

User	The User shall be able to view the research details of a particular Customer along with their personal details.
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# Software Tools

Operating System : Windows or Linux or Mac

Programming language: HTML, CSS, MongoDB-Atlas, React.js, javascript

IDE :VS-code

# Hardware Specification

Processor: Intel Core i5

RAM: 4GB

Hard Disk: 500 TB