# **ASSURE AUDIT**

# A PROJECT REPORT

# Submitted by

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In partial fulfillment for the award of the degree of

# **BACHELOR OF ENGINEERING**

in

# INFORMATION TECHNOLOGY LAXMI INSTITUTE OF TECHNOLOGY, SARIGAM





Gujarat Technological University, Ahmedabad
May, 2024





# Laxmi Institute of Technology-Sarigam

At: Sarigam, P.B. No-15, P.O.: Valsad, Pin: 396155

# **CERTIFICATE**

This is to certify that the project reports, submitted along with the project entitled Assure Audit has been carried out by Aditya Shantilal Bathani (200860116020) under my guidance in partial fulfilment for the degree of Bachelor of Engineering in Information Technology, 8<sup>th</sup> Semester of Gujarat Technological University, Ahmedabad during the academic year 2023-24.

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# **DECLARATION**

We hereby declare that the Internship / Project report submitted along with the Internship / Project entitled Assure Audit submitted in partial fulfilment for the degree of Bachelor of Engineering in Information Technology to Gujarat Technological University, Ahmedabad, is a bona-fide record of original project work carried out by me / us at BosLeo Technology Private Limited under the supervision of Mr. Maulin Desai and that no part of this report has been directly copied from any students' reports or taken from any other source, without providing due reference.

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**ACKNOWLEDGEMENT** 

The internship opportunity I had with **BosLeo Technology Private Limited** was a great

chance for learning and career advancement. Therefore, I consider myself a very fortunate

individual who was provided with an opportunity to be a part of it. Additionally, I am

grateful for having this opportunity to meet so many nice folks and professionals who

mentored me though this internship period.

I would like to express my appreciation to my Industry Mentor, Mr. Maulin Desai, for

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through the long tedious hours developing a project and preparing the report.

In the light of the foregoing, I would like to take this opportunity to express my profound

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internship, who despite being incredibly preoccupied with her duties, took the time to pay

attention towards me and give some advice to keep me on the right track.

Aditya S Bathani

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# **ABSTRACT**

An audit is derived from the Latin word "audire" which means to verify the authenticity of accounting records with the help of an independent audit.

Assure Audit is the company's proprietary product. It is Software as a Service (SaaS) product. It is used for the auditing purpose that best suit for all types i.e., is finance, health care, small-sized, medium-sized, and even large capital companies.

Assure Audit is available in all the different platforms that are Web and App (Android, iOS).

Assure Audit provides you with the flexibility of creating customizations templates for audits. In Assure Audit, user can perform audits in just a few simple steps.

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# CHAPTER 1. OVERVIEW OF THE COMPANY

# 1.1 HISTORY

BosLeo is a US based technology company started in 2012. On projects ranging from mobile apps to e-commerce websites, BosLeo collaborates with local businesses as well as organizations and brands from around the world. It is dedicated to developing new products and services for business clients in finance, pharma, audit, education, and entertainment industries. BosLeo develops products and services for clients through innovative application of web, mobile, analytics, and other software technologies. BosLeo is an innovative technology company which creates commercial grade products. Their prime focus is on finance, healthcare, education, and entertainment industries. They create value for their clients by developing new products and services using imagination, creativity, and technology. [1]



Fig 1.1.1 Organization History

# 1.2 SCOPE OF WORK

To create innovative technology-based solutions to add value to various business domains such as customer engagement, finance, operations, and various analytics for insight development to achieve strategic goals. To design technology solution to accomplish key goals: Project brand value, make a compelling product/service offer to attract customers, communicate value proposition, engage customer with call to action, solve business problems and increase process efficiencies across functional domains.<sup>[1]</sup>

# 1.3 ORGANIZATION CHART

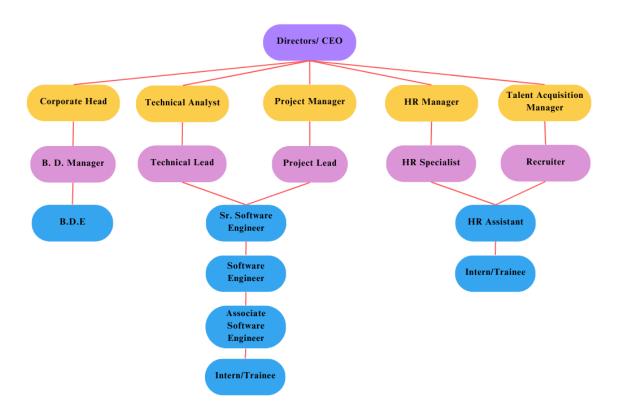


Fig 1.3.1 Organization Chart

# 1.4 CAPACITY OF COMPANY

Our three offices in India are situated in Valsad, Surat, and Nashik. We employ more than 100 people in total. Over thirty people work from the office in the Valsad branch. BosLeo also has offices in Thailand, Germany, and the United States.

# CHAPTER 2. OVERVIEW OF DIFFERENT DEPARTMENTS OF THE ORGANIZATION AND LAYOUT OF THE PRODUCTION/PROCESS BEING CARRIED OUT IN THE COMPANY

# 2.1 DETAILS ABOUT THE WORK BEING CARRIED OUT IN EACH DEPARTMENT.

# • Accounting & Finance Department

No business can operate without an efficient supply of finance. It is the lifeblood of all organizations and the common denominator by which most business performance is measured both internally and externally. The accounting and finance department is responsible for ensuring the efficient financial management and maintain financial controls which are necessary to support all business activities. The following areas are managed under this department which can be conveniently grouped intofinancial systems, Payroll, Budgeting, Management accountingandTaxation.<sup>[3]</sup>

# • Sales & Marketing Department

The Marketing & Sales Department promotes the business and mission of the organization. It serves as the face of the company, coordinating and producing all materials representing the business. They reach out to prospects, customers, investors, and the community, while creating an overarching image that represents the company in a positive light. [13]

# • Human Resource Department

Human resources department is charged with finding, recruiting, screening, and training job applicants. It also administers employee benefit programs and handles employee compensation, benefits, and terminations.<sup>[6]</sup>

# • Technical Department

Every organisation in the world needs to have a specific technical support team that can address all its technical issues and offer it the assistance it needs. Typically known as the technical support department. This unit Oversees for continuously enhancing the business's technological capabilities. Product Design, website and app development, testing and maintenance are all tasks performed by the technical department.

# • System Administration Department

System Administrators organize, install, and support an organization's computer systems. These include local area networks (LAN), wide area networks (WAN) and other data communication systems.

# • Quality Assurance & Control Department

The goal of quality assurance is to identify and maintain a set of requirements and standards in software development. It helps ensure that every system and stage of development conforms to the standards and end-user requirements. Quality control involves testing activities that focus on the product itself. These actions are put in place to verify and check the conformance of the software to the set requirements.<sup>[7]</sup>

# • Designing Department

It includes the UI UX designers who create the user interface for an app, website, or other interactive media. Their work includes collaborating with product managers and engineers to gather requirements from users before designing ideas that can be communicated using storyboards. For these technologies like Figma, Adobe XD etc are used.

# Production, Planning & Control Department

Production Planning and Control is the core of the manufacturing unit. It includes material forecasting, master production scheduling, long-term planning, demand management, and more. The planning process kicks off with demand forecasting of a product. Using that forecast data and internal resources available, the production plan is created.<sup>[11]</sup>

# 2.2 LIST THE TECHNICAL SPECIFICATIONS OF MAJOR EQUIPMENT USED IN EACH DEPARTMENT.

Specification Of Computer:

• Processor: Intel core i5 10<sup>th</sup> gen

• RAM: 8GB

• SSD: 256 GB

• GPU: NVIDIA GeForce MX230

# 2.3 SCHEMATIC LAYOUT WHICH SHOWS THE SEQUENCE OF OPERATION FOR MANUFACTURING OF END PRODUCT.

Agile software development is a group of software development methods in which requirements and solutions evolve through collaboration between self-organizing, crossfunctional teams. It promotes adaptive planning, evolutionary development, early delivery, continuous improvement, and encourages rapid and flexible response to change.

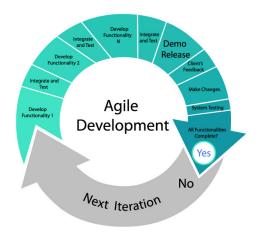


Fig 2.3.1 Sequence of Operation

In our project, First, we develop functionality then test that functionality. If there are any changes, then quick up gradation performs and gets tested. Same as we can develop all the functionality in a system.

# 2.4 DETAILS ABOUT EACH STAGE OF PRODUCTION

# • Requirements gathering

In this phase, requirements are defined. It includes explaining the business opportunities and plan the time and effort needed to build the project. Based on this information, technical and economic feasibility is evaluated.

# • Designing requirements

Once the project is identified, work is started with stakeholders to define requirements. User flow diagram or the high-level UML diagram are used to show the work of new features and show how it will apply to the existing system.

# Develop/ Iteration

When the team defines the requirements, the work begins. Designers and developers start working on their project, which aims to deploy a working product. The product will undergo various stages of improvement, so it includes simple, minimal functionality.

# Testing

In this phase, the Quality Assurance team examines the product's performance and looks for the bug.

# Deployment

In this phase, the team issues a product for the user's work environment.

### Feedback

After releasing the product, the last step is feedback. In this, the team receives feedback about the product and works through the feedback.

# CHAPTER 3. INTRODUCTION TO INTERNSHIP

# 3.1 INTERNSHIP SUMMARY

This internship aims to provide practical experience in front-end development & business analysis. The objective of the internship includes gaining proficiency in front-end framework i.e., angular, developing responsive web interfaces, and collaborating in a team environment.

The purpose of the internship is to help gain industry-standard skills, understand the expectations, and demands of the industry, and develop the ability to work collaboratively and efficiently. The scope of the internship includes using front-end frameworks, designing, and implementing web interfaces, working with other team members, developing, and maintaining code libraries, and optimizing web interfaces for performance and accessibility.

Also, it includes conducting research and analysis, developing process maps and requirements documents, collaborating with developers, managing project schedules and risks, and optimizing solutions for user experience and usability.

# 3.2 PURPOSE

# • Gaining practical experience:

This internship aims to provide an opportunity to gain practical experience in front-end development and business analysis.

# • Designing Skills:

The internship helps to build the abilities and expertise needed to design and develop user interfaces for web applications.

# • Analytical Skills:

It emphasized developing skills and knowledge required to work with stakeholders to identify and prioritize business requirements, analyse business processes, and develop solutions that meet stakeholder needs.

### • Teamwork:

Working in a team environment with other developers, designers, and stakeholders.

# • Building a professional network:

An opportunity to build teamwork and efficiency skills while also better understanding the demands and expectations of the industry.

### • Communication skills:

Good communication skills which include active listening, written communication, and verbal communication. To communicate about project expectations, solution suggestions and various other information related to improving a company's productivity.

Therefore, gaining an experience which helped to better understand the expectations and demands of the industry, and develop the ability to work collaboratively and efficiently.

# 3.3 OBJECTIVE

- To gain practical experience in developing front-end applications using industrystandard tools & technologies.
- To learn how to design and implement responsive and user-friendly web interfaces.
- To become proficient in using HTML, CSS, and related front-end frameworks.
- To learn how to debug and troubleshoot front-end code.
- To understand the importance of user experience (UX) and usability in developing solutions that meet stakeholder needs and front-end development.
- To gain practical experience in conducting business analysis activities and working with stakeholders to understand their requirements.
- To become proficient in using business analysis tools and techniques such as process mapping, data modeling, and requirements elicitation.
- To collaborate with other business analysts, developers, and stakeholders in a team environment.

• To learn how to develop and document business processes and requirements elicitation.

# 3.4SCOPE

- Learning and using Angular, a front-end framework. Developing responsive and mobile-friendly web interfaces.
- Designing and implementing web interfaces using HTML, CSS, and JavaScript. Developing and maintaining code libraries and reusable components.Learning how to use development tools such as IDEs, text editors, and debugging tools.
- Working with other team members to integrate front-end code with back-end systems.
   Participating in code reviews and contributing to the development process. Working with stakeholders to understand and meet user requirements.
- Gaining exposure to the broader software development process, including testing, deployment, and maintenance. Conducting research and analysis to identify business requirements and opportunities for improvement.
- Developing process maps, data models, and other artifacts to document business processes. Developing requirements documents and other artifacts to communicate stakeholder needs to development teams. Developing insights from data and presenting findings to stakeholders.
- Learning how to apply agile and other project management methodologies to manage project delivery.
- Developing communication and collaboration skills to work effectively with stakeholders and team members.
- Learning how to optimize web interfaces for performance and accessibility.

  Understanding how to optimize solutions for user experience and usability.

# 3.5 TECHNOLOGIES AND LITERATURE REVIEW

#### • HTML:

The Hypertext Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets and scripting languages such as JavaScript. [5]

### • CSS

Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.<sup>[10]</sup>

## • JavaScript:

JavaScript is a scripting or programming language that allows us to implement complex features on web pages — every time a web page does more than just sit there and display static information for us to look at — displaying timely content updates, interactive maps, animated 2D/3D graphics, scrolling video jukeboxes, etc. [9]

# • TypeScript:

TypeScript is a language for application-scale JavaScript. TypeScript adds optional types to JavaScript that support tools for large-scale JavaScript applications for any browser, for any host, on any OS. TypeScript compiles to readable, standards-based JavaScript. [12]

# • Figma:

Figma is a collaborative web application for interface design, with additional offline features enabled by desktop applications for macOS and Windows. The feature set of the Figma focuses on user interface and user experience design, with an emphasis on

real-time collaboration, utilising a variety of vector graphics editor and prototyping tools. [4]

### • Jira:

Jira is a software application developed by the Australian software company Atlassian that allows teams to track issues, manage projects, and automate workflows.

# • Angular:

Angular is a development platform, built on TypeScript. As a platform, Angular includes a component-based framework for building scalable web applications. A collection of well-integrated libraries that cover a wide variety of features, including routing, forms management, client-server communication, and more. It is a suite of developer tools to help you develop, build, test, and update your code. With Angular, you're taking advantage of a platform that can scale from single-developer projects to enterprise-level applications. Angular is designed to make updating as straightforward as possible, so take advantage of the latest developments with minimal effort. [2]

# 3.6 INTERNSHIP PLANNING

- The entire internship program was well planned by the company.
- I was trained for different roles namely business analyst and Frontend Developer in which I got trained for different technologies and tools like HTML, CSS, JavaScript, TypeScript, Angular, Figma and Jira.
- Along with training, we were assigned a project to utilize our learned skills in an
  effective manner.

# 3.6.1 Internship Development Approach and Justification

- o The approach we followed was a learning approach.
- First, we were trained in different technologies and tools and then we completed assigned projects correspondingly.

 For training, technical trainer was allocated and for project work sprints were organized to work with team.

# 3.6.2 Internship Effort and Time, Cost Estimation

- Internship Efforts
  - Enhanced analytical and critical thinking.
  - Learned various new technologies and did hands on practice for effective learning.
  - Explored alternate and more optimized ways to resolve problems.
  - Learned while rectifying my mistakes and discussing it with colleagues and seniors.
- o Internship Time

The internship is for the duration of six months.

• Starting date: FEB 1, 2023

• Ending date: JUL 31, 2023

- Cost Estimation
  - To complete this internship, 12 Weeks of Time and Weekly approximately 45 hours of time needed. The cost estimation of the project Real-Estate site as follows: -

#### Cost estimation:

Development: - 90000/- RS

Domain: - 1000/- RS

Hosting: - 9000/- RS per year

Maintenance: - 10000/- RS per year

Total: - 110000/- RS

# 3.6.3 Roles and Responsibilities

o Role Offered:

- Business Analyst & Frontend Developer Intern
- Responsibilities
  - Learned to create a project from scratch starting from requirement elicitation. Implementing frontend of the web application using Angular.

# 3.3.4 Group Dependencies

The entire project was assigned between four team members.
 Requirement gathering was done by me. After that all the modules were done collectively.

# 3.7 INTERNSHIP SCHEDULING

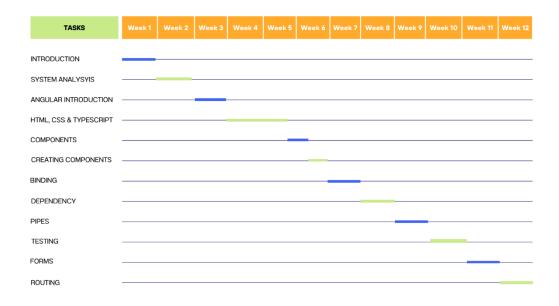


Fig. 3.7.1 Internship Schedule (Gantt Chart)

# CHAPTER 4. SYSTEM ANALYSIS

# 4.1 STUDY OF CURRENT SYSTEM

It is a tough task to maintain the details of the audit's file, and when we want any details about audits, it consumes time for searching. So, there should be an automated system to overcome the defects of the existing system.

Assure Audit is a cloud-based system. The need to develop this is to simplify auditrelated operations by offering a solution which is easy to use. It gives flexibility to create custom templates to perform different types of audits. So, the cost of hiring the different auditors to perform different types of auditing gets reduced.

The system generates various reports for better management of data. This information can be used for better study and analysis.

# 4.2 PROBEM AND WEAKNESS OF CURRENT SYSTEM

It is very time consuming and cumbersome and, it reduces the efficiency and accuracy.

# 4.3 REQUIREMENT OF NEW SYSTEM

# • Functional Requirements

- Login:Users/employees can log into the system depending on the role assigned by the organization and have different access to the operational area depending on the role.
- Organization Setup: The Organization can manage their details, business units and teams.
- User Setup: Organizations can manage roles and Operational area access and assign it to a particular user/employee of the organization/customer/supplier.
- o **Customer Setup**: The organization can manage their customer details.
- o **Supplier Setup**: The organization can manage their supplier details.
- Audit Setup:

• **Audit Type:** Organizations manage their Audit Type.

 Audit Template: Organizations manage their audit forms and their scoring for each particular question. Additionally, they can manage the overall audit scores.

### Audit Service

- Audit Contract: Organizations manage contracts for their clients.
- **Audit Package:** Organizations create the Audit Package with different combinations of templates and give a package discount.
- **Service Packages:** Organizations can assign multiple audit packages to a particular audit agreement.

#### Audit Execution

- Audit Plan: Organizations can plan audits and manage its status.
- Audit Submission: Organizations can view the Audit results and who
  has performed that Audit and can also see the reports of the overall Audit
  performed.
- Audit Action: Here, The Organization sees the Action assigned to the employee of the supplier or organization employee and changes the status of that Action.

# Non-Functional Requirements

- Security: It is important to specify that the website is secure enough because all the medical details are listed.
- Scalability & Performance: ensuring that the system can scale to meet expected traffic and order volume at normal and peak times.
- Accessibility: To ensure that the site is fully accessible to the end-user without any barriers.
- Compatibility: Ensuring that the application compatible enough to be used by the Customer.
- Availability: Defined that the application will be available all the time on any agreed platforms.

o **Better Recovery:** If somehow there is a premature exit from the website, it will recover easily without any problems.

- o **Performance:** The website must be optimized in the performance and the website must appear flexible a per the user needs.
- Usability: The ease with which the User can learn, operate, prepare inputs,
   and interpret outputs through interaction with the system.
- Maintainability: The ease in which the faults in the software will be found and fixed easily & quickly.

# 4.4 SYSTEM FEASIBILITY

- The system contributes to the overall objectives of the organization.
- The system can be implemented using the current technology and within the given cost and schedule constraints.
- Yes, the system can be integrated.

# 4.5 FEATURES OF NEW SYSTEM

Assure Audit is being created to provide a centralized management system for all entities of an Audit and removing ambiguity which will ultimately provide an integrated solution to the management problem being faced in the manual and old way of data-keeping.

Assure Audit is being created to digitize and paperless the Auditing process, to eliminate errors and generate dynamic reports which will allow users to conclude results and take the decisions very effectively, more accurately with less time-consuming.

Auditing is defined as a systematic and independent examination of data, statements, records, operations, and performances of an enterprise for a stated purpose. In any auditing the auditor perceives and recognizes the propositions before him for examination, collects evidence, evaluates the same and on this basis formulates his judgement which is communicated through his audit report.

There are multiple types of Audits like Internal Audit, External Audit, Financial Audit, Structural Audit etc...

Assure Audit is the company's proprietary product. It is Software as a Service (SaaS) product. It is used for the auditing purpose that is best suited for all types i.e., finance, health care, small-sized, medium-sized, and even large capital companies.

Assure Audit is available in all the different platforms that are Web and App (Android, iOS).

Assure Audit provides you with the flexibility of creating customization templates for audits. In Assure Audit, users can perform audits in just a few simple steps.

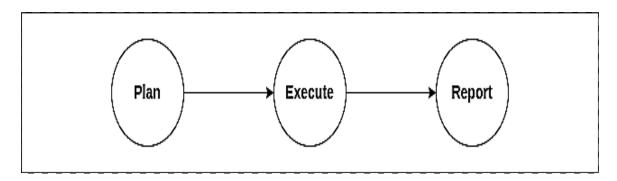


Fig. 4.5.1 Introduction

### 1. Plan

- Define and Configure Template and scoring.
- Plan Audits Questions / Standards / Checklists.

#### 2. Execute

- Schedule audits.
- Execute audits.
- Submit audits and assign actions.

# 3. Report

- Alert.
- Notify.
- Report audit results and actions.

# 4.6 MAIN MODULES

- Login
- Home Screen (Dashboard)
- Calendar
- Organization Setup
- User Setup
- Customer Setup
- Supplier Setup
- Audit Service Module 1
- Audit Service Module 2
- Audit Service Module 3
- Audit Service Module 4
- Audit Service Module 5

# 4.7 SELECTION OF SOFTWARE

# • Frontend:

• Angular: Angular is an application-design framework and development platform for creating efficient and sophisticated single-page apps. These Angular docs help you learn and use the Angular framework and development platform, from your first application to optimizing complex single-page applications for enterprises. Tutorials and guides include downloadable examples to help you start your projects.<sup>[2]</sup>

### Back End

OGoLang: The Go programming language is an open-source project to make programmers more productive. Go is expressive, concise, clean, and efficient. Its concurrency mechanisms make it easy to write programs that get the most out of multicore and networked machines, while its novel type of system enables flexible and modular program construction. Go compiles quickly to machine code yet has the convenience of garbage collection and the power of

run-time reflection. It's a fast, statically typed, compiled language that feels like a dynamically typed, interpreted language.

MariaDB: MariaDB Server is one of the most popular open-source relational databases. It's made by the original developers of MySQL and guaranteed to stay open source. It is built upon the values of performance, stability, and openness, and MariaDB Foundation ensures contributions will be accepted on technical merit. Recent new functionality includes advanced clustering with Galera Cluster 4, compatibility features with Oracle Database and Temporal Data Tables, allowing one to query the data as it stood at any point in the past.

Operating System	Windows 10	
Front-end	Web	Angular
	App	Android
Back-end	Go Lang	
Database	MariaDB	

Table 4.7.1Software Selection

# **CHAPTER 5. SYSTEM DESIGN**

# 5.1 SYSTEM DESIGN & METHODOLOGY

# **Structure Of Project:**

#### Dashboard

Dashboard feature gives a snapshot of various information sets on:

- About the Audit Plan.
- o Audit Results.
- o Compliance status of audits.
- o Audit Submissions.
- Open action items for a specific time period.
- Company admin can check the most recent audits on recent audit sections which provides information for specific audits.

### • Calendar

A calendar functionality allows user can choose the day, week, month, or agenda view to check the audit plan status or audit submission status. It also has also options to filter the data.

# • Customer

User can create a new customer and manage existing customer information.

# • Supplier

User can create a new supplier and manage existing supplier information.

### Audit Setup

This operational area has three tiles: Audit Type, Audit Template, and Notification Settings.

# Audit Type

Allows for creating a new audit type and update or delete existing of the audit type. Audit Type is used in defining the Audit Template.

# o Audit Template

• User can create a new audit template or add a new template version of existing audit template. These templates are used for conducting any inspection, audit, certifications, or quality checklist, etc.

- Each audit template may have three different statuses: Draft, Published or Unpublished. There is only one published version allowed for any audit template.
- Each Audit template has four different parts: Template, Section, Category, and Score.
- Template part: Template part should be used for template related key information such as Audit Type, Audit Template name, Price (if applicable), Cost (if applicable), Applicable from date selection.
- Section part: There are four areas to manage key elements to set up the audit/inspection/certification etc. The section control is used define a header input form for any new audit. Here various types of input elements can be selected e.g., Text input, Numeric, date, etc. These elements are presented to auditor at the start of any new audit for his/her company or customer. A section preview is shown to the user as how it will display at the time of audit execution.
- Category part: Here the user can add various category to organize the audit/inspection/certification related group names. Within each category(grouping), user can add question/standard/inspection description. Once question/standard/inspection item is defined, user can select various key input field elements from the question control section to add to specific question/standard/inspection. User can further apply a setting for each element of the questions. User can preview the questions before publishing the template.
- Score part: User can create audit score for different range. Each range is
  for either pass or fail result. User can add weight to each category's
  subtotalled score which will contribute to combined score.

# Notification Settings

This tile is used for creating a notification alert to inform customer when audit pass / fail event occurs.

#### • Audit Service

Audit service operational area has three tiles: Audit Contract, Audit Package, Service Package

#### o Audit Contract

User can create a new audit contract and update or delete any existing audit contract.

# o Audit Package

User can create a new audit package and update or delete the audit package which are not used in any of the audit plan. While creating a new audit package, user can add the audit package details and select the multiple audit template. For audit package pricing, user can customize the pricing of any selected audit template or offer a discount on audit package pricing.

# Service Package

User can create a new service package and update or delete the service package which are not used in any of the audit plan. While creating a new service package, user can add the service package details and select the multiple audit packages. Service Package pricing is the sum of selected audit packages pricing.

### • Audit Execution

Audit Execution operational area has three tiles: Audit Plan, Audit Submission, Audit Action

#### o Audit Plan

User can create a new audit plan and update or delete the audit plan if the status is pending. Audit plan with in-progress, Completed or Cancelled status is not allowed to update or delete. User can change the audit plan status form audit plan listing. Once user change the status it can't be revert to the previous status. Each audit plan contains multiple Audit Packages. Audit plan pricing depends on selected audit packages. Audit plan also have the option to filter the data.

#### o Audit Submission

In audit submission, user can select any audit form the list of audit timeline. For each audit user can view audit summary, category score and audit reports with graphical

representation. Print option allows to print the hard copy of audit reports. Audit summary tab gives an overview of primary and secondary score.

#### Audit Actions

In audit actions, user can select any audit form the list of audit timeline and view the audit actions and audit activity log details.

### • User Admin

This operational area has two tiles: App Role and App User.

# o App Role

User can create a new role or update and delete any existing role. While creating a new role, user can add role details and assign a operational area access for web and mobile platform.

# o App User

User can create a new app user or update and delete any existing app user. User can add the user details and assigned required "App Role(s)" for specific app user.

Org. Setup

# • Org. Setup

Org. setup contains four sections i.e., Company Details, Business Unit, Team and Location. In Company details section user can add the company logo and basic info and company info. Business Unit, Team and Location section allows user to create a new record or update existing record and delete the existing record.

# 5.2PROCESS DESIGN/STRUCTURE DESIGN

# • User setup

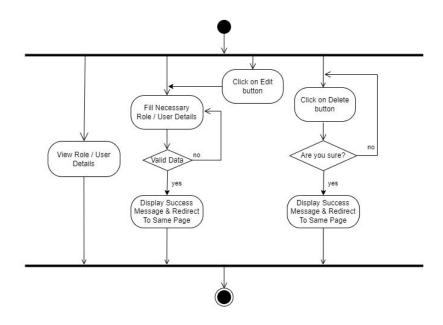


Fig 5.2.1 User Setup

# • Organization Setup

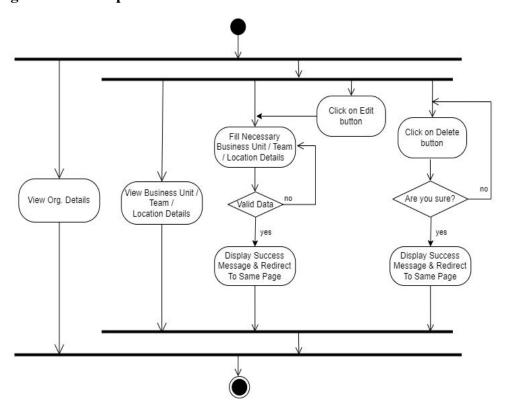


Fig 5.2.2 Organization Setup

# • Customer Setup

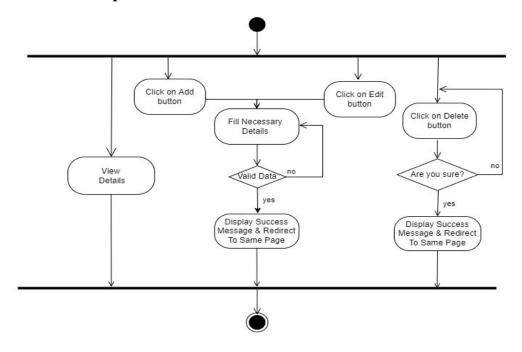


Fig 5.2.3 Customer Setup

# • Supplier Setup

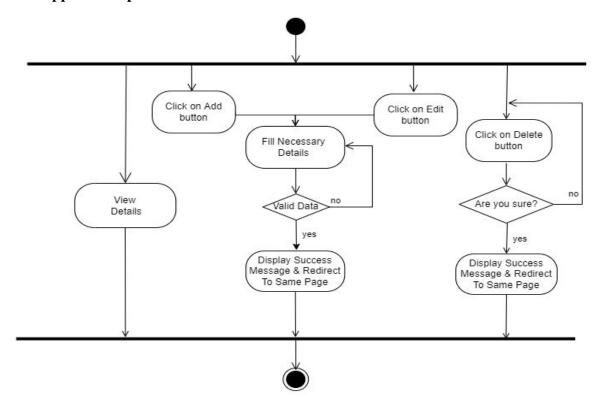


Fig 5.2.4 Supplier Setup

# • Audit Setup / Audit Template

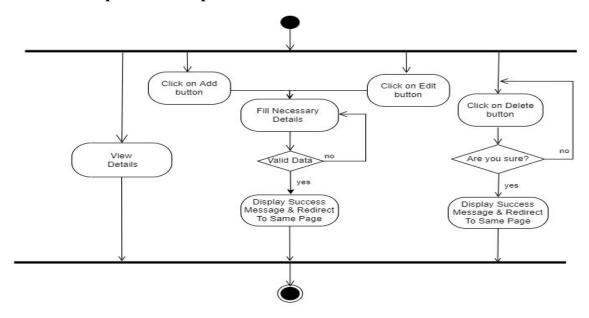


Fig 5.2.5 Audit Setup/Template

### • Audit Service

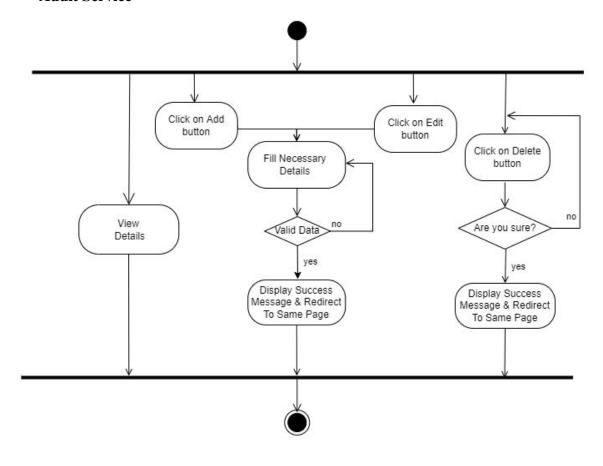


Fig 5.2.6 Audit Service

## • Audit Execution

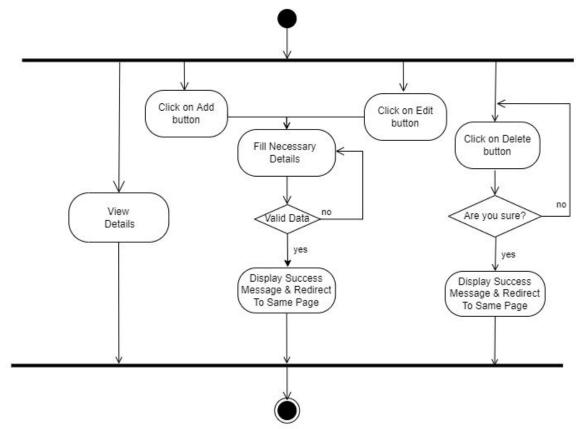


Fig 5.27 Audit Execution

# • Super Admin-Use Case

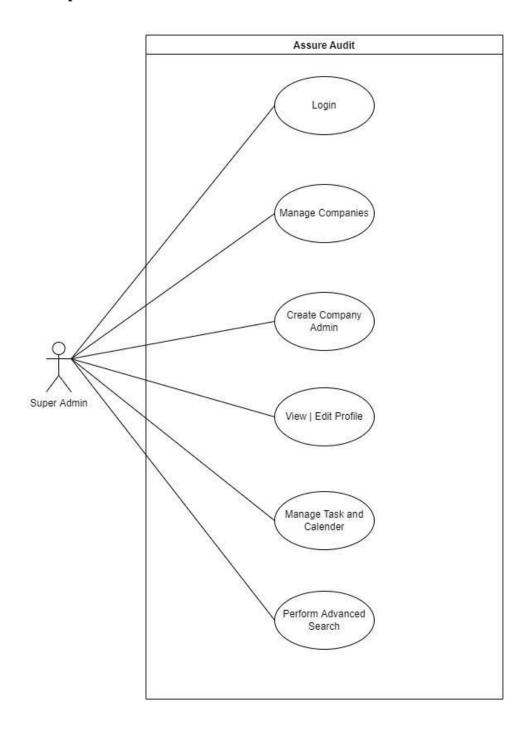


Fig 5.2.8Super Admin

# • Company Admin

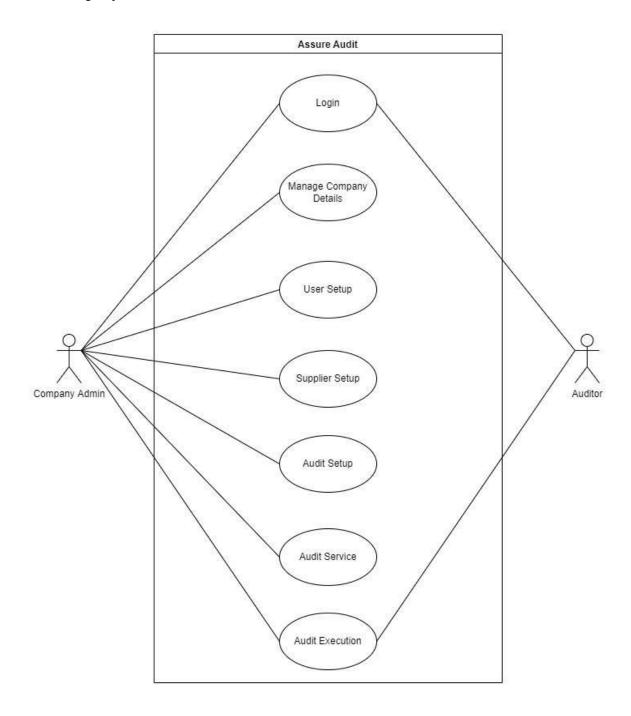


Fig 5.2.9 Company Admin

## **CHAPTER 6. IMPLEMENTATION**

### **6.1 IMPLEMENTATION PLATFORM**

## **Angular**

Angular is a development platform, built on TypeScript. As a platform, Angular includes a component-based framework for building scalable web applications. A collection of well-integrated libraries that cover a wide variety of features, including routing, forms management, client-server communication, and more. It is a suite of developer tools to help you develop, build, test, and update your code. With Angular, you're taking advantage of a platform that can scale from single-developer projects to enterprise-level applications. Angular is designed to make updating as straightforward as possible, so take advantage of the latest developments with minimal effort. [2]

## **IntelliJ IDEA**

IntelliJ IDEA is an integrated development environment (IDE) written in Java for developing computer software written in Java, Kotlin, Groovy, and other JVM-based languages. It is developed by JetBrains. The IDE provides certain features like code completion by analysing the context, code navigation which allows jumping to a class or declaration in the code directly, code refactoring, code debugging, linting and options to fix inconsistencies via suggestions.

## **6.2 MODULE SPECIFICATION**

### • Dashboard

Dashboard feature gives a snapshot of various information sets on:

- o About the Audit Plan.
- o Audit Results.
- o Compliance status of audits.
- Audit Submissions.

- o Open action items for a specific time-period.
- Company admin can check the most recent audits on recent audit sections which provides information for specific audits.

#### • Calendar

A calendar functionality allows user can choose the day, week, month, or agenda view to check the audit plan status or audit submission status. It also has also options to filter the data.

#### Customer

User can create a new customer and manage existing customer information.

## • Supplier

User can create a new supplier and manage existing supplier information.

### • Audit Setup

This operational area has three tiles: Audit Type, Audit Template, and Notification Settings.

#### o Audit Type

Allows for creating a new audit type and update or delete existing of the audit type. Audit Type is used in defining the Audit Template.

### o Audit Template

- User can create a new audit template or add a new template version of existing audit template. These templates are used for conducting any inspection, audit, certifications, or quality checklist, etc.
- Each audit template may have three different statuses: Draft, Published or Unpublished. There is only one published version allowed for any audit template.
- Each Audit template has four different parts: Template, Section, Category, and Score.

• **Template part:** Template part should be used for template related key information such as Audit Type, Audit Template name, Price (if applicable), Cost (if applicable), Applicable from date selection.

- Section part: There are four areas to manage key elements to set up the audit/inspection/certification etc. The section control is used define a header input form for any new audit. Here various types of input elements can be selected e.g., Text input, Numeric, date, etc. These elements are presented to auditor at the start of any new audit for his/her company or customer. A section preview is shown to the user as how it will display at the time of audit execution.
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In audit actions, user can select any audit form the list of audit timeline and view the audit actions and audit activity log details.

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User can create a new role or update and delete any existing role. While creating a new role, user can add role details and assign a operational area access for web and mobile platform.

## App User

User can create a new app user or update and delete any existing app user. User can add the user details and assigned required "App Role(s)" for specific app user.

Org. Setup

## • Org. Setup

Org. setup contains four sections i.e., Company Details, Business Unit, Team and Location. In Company details section user can add the company logo and basic info and company info. Business Unit, Team and Location section allows user to create a new record or update existing record and delete the existing record.

#### 6.3 RESULTS

### • Training Work:

**o** Writing using simple Angular JS Library.

Fig 6.3.1 myfirstexample.html

Creating a component.

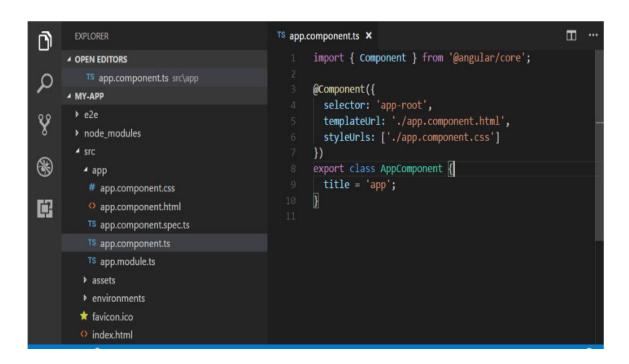


Fig 6.3.2 Creating component

Working of button task.

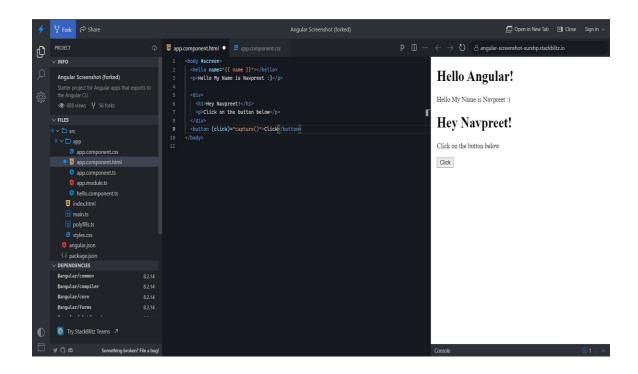


Fig 6.3.3 Working

## • Implementation Work:

## Login Page



Fig 6.3.4 Login Page

## Home Screen (Dashboard)

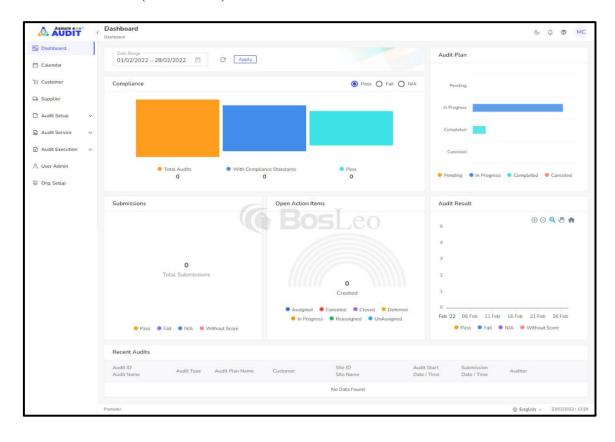


Fig 6.3.5 Home Screen (Dashboard)

## Calendar

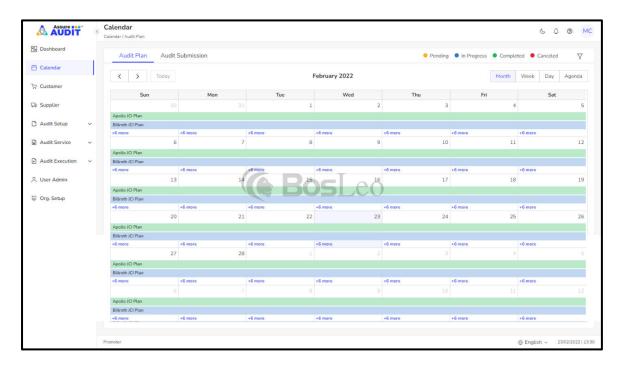


Fig 6.3.6 Calendar 1

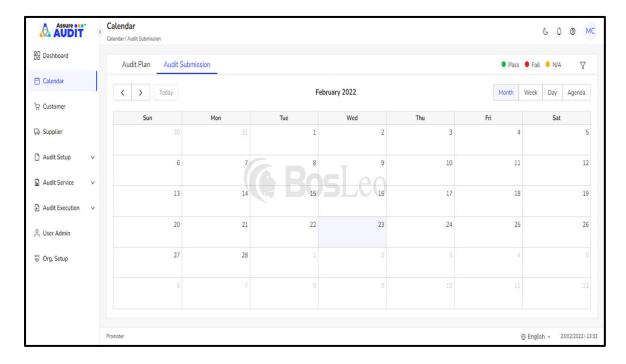


Fig 6.3.7 Calendar 2

## o Organization Setup

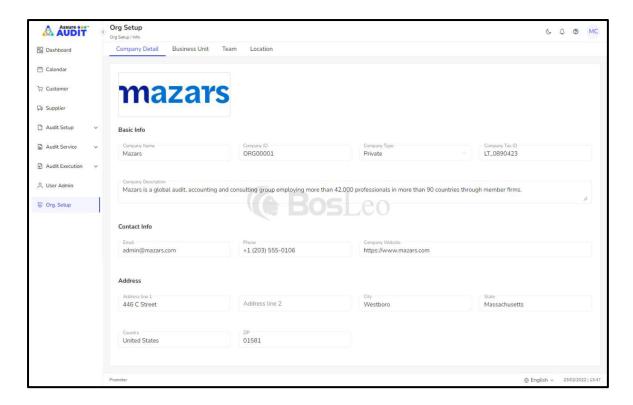


Fig 6.3.8 Organization Set up

## o User Setup

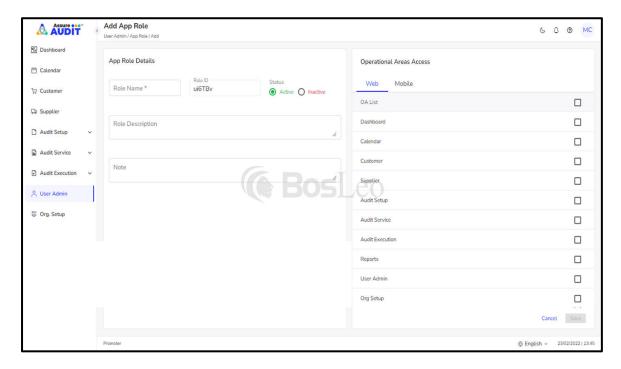


Fig 6.3.9 User Set up

## Customer Setup

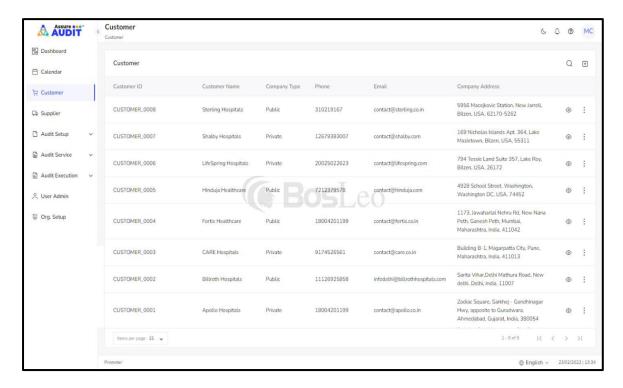


Fig 6.3.10 Customer Set up

## Supplier Setup

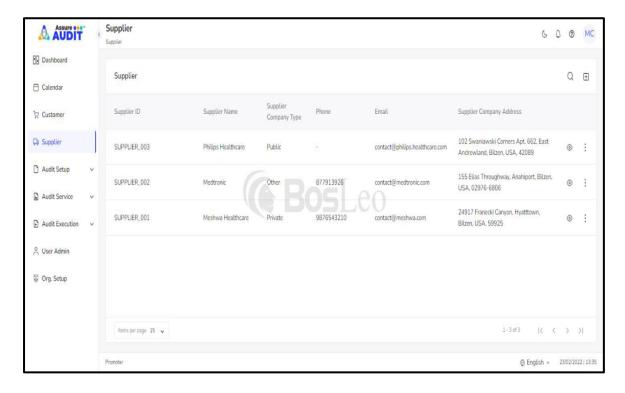


Fig 6.3.11 Supplier Set up

### o Audit Service



Fig 6.3.12 Audit ServiceModule 1



Fig 6.3.13 Audit ServiceModule 2

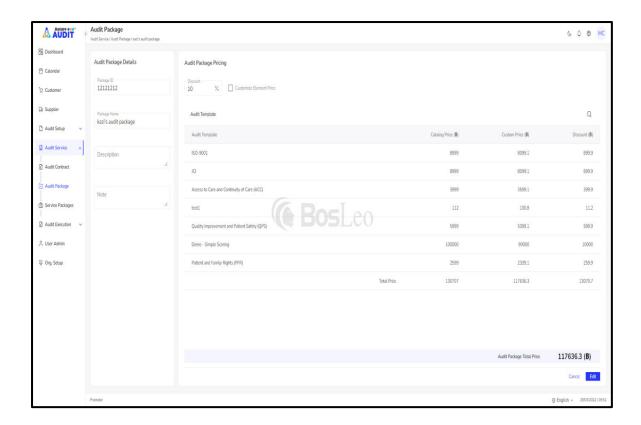


Fig 6.3.14 Audit ServiceModule 3

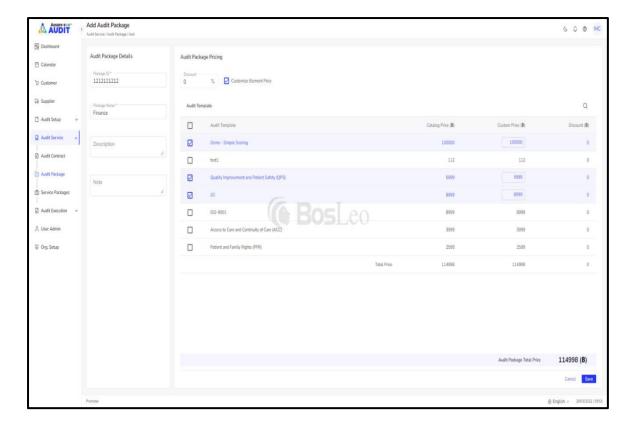


Fig 6.3.15 Audit ServiceModule 4



Fig 6.3.16 Audit ServiceModule 5

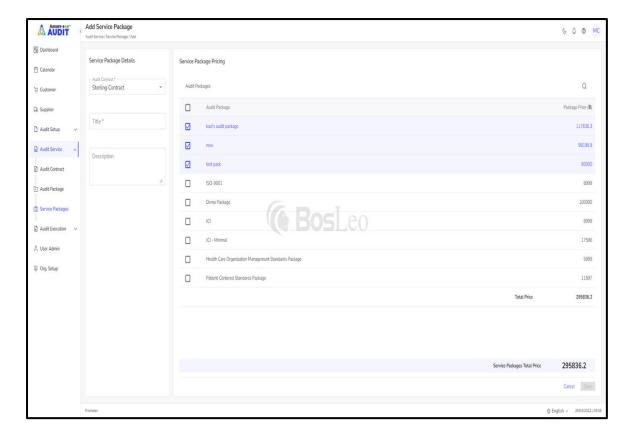


Fig 6.3.17 Audit ServiceModule 6

# Reports

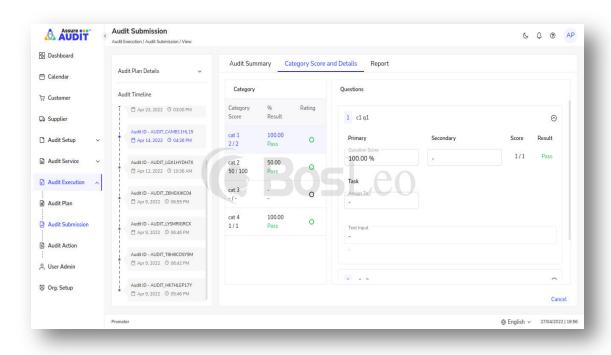


Fig 6.3.18 Reports UI - 1

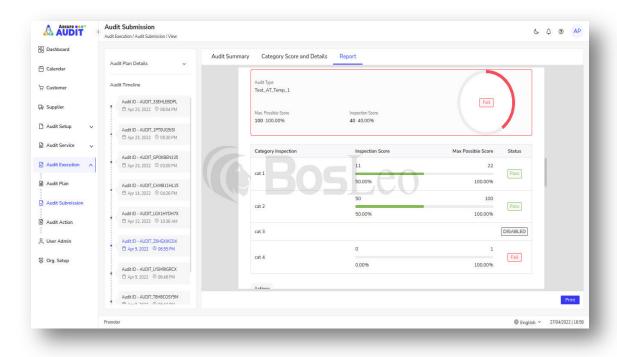


Fig 6.3.19 Reports UI - 2

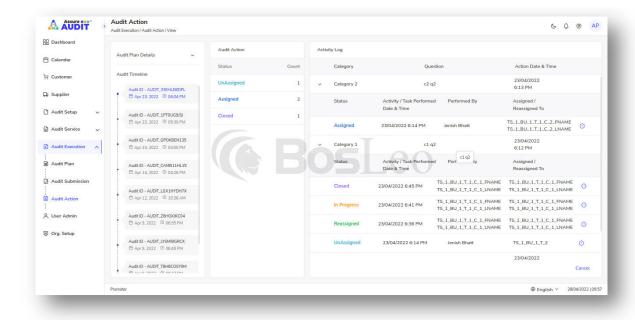


Fig 6.3.20 Reports UI - 3

# **CHAPTER 7. TESTING**

## 7.1 TESTING PLAN

After completely developing each module, I was assigned to test every functionality of each module whether they are working properly.

## 7.2 TEST RESULTS AND ANALYSIS

## 7.2.1 Test Cases

Table 7.21 Login Test Cases

TC ID	Description	Steps	Expected Result	Input Value	Actual Result	TC Result
T01	To verify, that user can login with valid Username and Password	Open Assure Audit Website Enter Username in Username field Enter Password in Password field Click on Login button	Successfully Login	nav@ma zars.com	Successfully Login	PASS
T02	Verify that as soon as the login page opens, by default the cursor should remain on the username textbox.	Open Login	Cursor will remain on username textbox	-	Cursor is not on username textbox	FAIL

T03	Verify that the	Open Assure	User is able	test@ma	User can	
	user can navigate	Audit Website	to navigate or	zars.com	navigate or	
	or access the	Open Login	access the		access the	
	different controls	Page.	different		different	
	by clicking on	Enter username	controls by		controls by	PASS
	TAB key on the	and then press	clicking on		clicking on	
	keyboard.	TAB key.	TAB key on		TAB key on	
			the keyboard		the	
					keyboard	
T04	Check if the	Open Assure	Password	*****		
	password is in	Audit Website	should be in			
	masked form	Enter Password	masked form		As	PASS
	when typed in the	in password	when typed in		Expected,	IASS
	password field.	field.	the password			
			field			
T05	Check if the	Open Assure	Password	-		
	password can be	Audit Website	should not be			
	copy-pasted or	Open Login	able to copy-			
	not.	Page.	pasted		As	
		Copy entered			Expected,	PASS
		password from			Expected,	
		password field				
		and paste it to				
		note pad.				
T06	Verify that the	Open Assure	Successful	nav@ma		
	user can login by	Audit Website	login	zars.com		
	entering valid	Open Login		*****		
	credentials and	Page.			Login	PASS
	pressing Enter	Input			Successful	
	key.	Credentials &				
		press on Enter				
		button.				

T07	Check that the	Open Assure	User should	test@ma		
	user is not able to	Audit Website.	not be able to	zars.com		
	login with an	Open Login	login	*****		
	invalid username	Page		*	Λ α	
	and password.	Enter Wrong			As	PASS
		username or			Expected,	
		password.				
		Click on login				
		button.				
T08	Verify that the	Open Assure	Validation	-		
	validation	Audit Website.	message			
	message gets	Open Login	should be			
	displayed in case	Page	displayed			
	the user leaves the	Leave			As	PASS
	username or	Username or			Expected,	rass
	password field as	password field				
	blank.	to blank				
		Click on login				
		button.				
T09	Check that the	Open Assure	Invalid	-		
	validation	Audit Website.	username			
	message is	Open Login	validation			
	displayed in the	Page	error message			
	case the user	Enter username	should be		As	PASS
	exceeds the	with 20	displayed		Expected,	rass
	character limit of	characters				
	the user's name	Click on login				
	and password	button.				
	fields.					

T10	Verify that closing	Open Assure	User should -		
	the browser	Audit Website.	not log out.		
	should not log-out	Open Login			
	an authenticated	page & Enter			
	user. Launching	valid			
	the application	Credentials			
	should lead the	Click on Login		As	PASS
	user to login state	button		Expected,	TASS
	only.	Close the web			
		browser & again			
		open browser			
		Again navigate			
		to Assure Audit			
		website			
T11	Verify that as	Open Assure	Cursor will -		
	soon as the login	Audit Website	remain on	Cursor is	
	page opens, by	Open Login	username	not on	
	default the cursor	Page.	textbox	username	FAIL
	should remain on			textbox	
	the username			LOALOOA	
	textbox.				

Table 7.2.2 Test cases for User Admin

TC	Description	Steps	Expected	Input Value	Actual	TC
ID			Result		Result	Result
T1	Verify that	Open Assure	Adding a new	Add Values		
	the User	Audit Website	App role has	in required	Adding a	
	Admin OA	Log in to the	all the	fields.	new App	
	for adding	system using user	mandatory		role has all	
	new App	credentials.	fields required		the	
	role has all	Open User Admin	for adding an		mandatory	PASS
	the	OA.	App Role.		fields	rass
	mandatory	Click on Add new			required	
	fields	button in App			for adding	
	required for	Role Section.			an App	
	adding an				Role.	
	App Role.					
T2	Verify that	Open Assure	Adding a new	Add Values		
	the User	Audit Website	App user has	in required	Adding a	
	Admin OA	Log in to the	all the	fields.	new App	
	for adding	system using user	mandatory		user has all	
	new App	credentials.	fields required		the	
	User has all	Open User Admin	for adding an		mandatory	PASS
	the	OA.	App Role.		fields	rass
	mandatory	Click On App			required	
	fields	User tab.			for adding	
	required for	Click On Add			an App	
	adding an	new button in App			Role.	
	App User	User Section.				

Т3	Verify that	Open Assure	Only Assigned	-		
	Operational	Audit Website	OA's must be			
	Access	Log in to the	accessible.			
	Area only	system using user				
	give access	credentials.				
	to selected	Open User Admin				
	area.	OA.			Only	
		Select any one			Assigned	
		role and view			OA's must	PASS
		which OA access			be	17100
		is given OR create			accessible.	
		a new role and			uccessioie.	
		give OA access to				
		the role.				
		Login with that				
		role in system and				
		try to access that				
		OA's.				
T4	Verify that	Open Assure	The Password			
	the		field has proper	Combinatio		
	password	Log in to the		n of		
		system using user		alphabets		
	proper	credentials.		and	The	
	validations.	Open User Admin		numbers,	Password	
		OA.		Only	field has	
		Click on App		numbers,	proper	PASS
		User tab.		Only	validations	
		Click On Add		alphabets,		
		new button in App		words		
		User Section OR		containing		
		Open any existing		lengths of		
		record in update		Five and 10		
		mode.		characters.		

Table 7.2.3 Test cases for Customer Setup

TC	Description	Steps	Expected	Input	Actual	TC
ID			Result	Value	Result	Result
T1	Verify that the Customer OA has all the mandatory fields required for adding Customer.	Open Assure Audit Website Log in to the system using user credentials. Open Customer OA. Click on Add new Button.	Customer OA has all the mandatory fields required for adding Customer.	-	Customer OA has all the mandatory fields required for adding Customer.	PASS
T2	Verify Upload Image button is clickable or not.	Open Assure Audit Website Log in to the system using user credentials. Open Customer OA. Click on Add new Button. Click on Upload Image Button.	Upload Image button is clickable.	-	Upload Image button is clickable.	PASS
Т3	Verify whether the entire button with button text	Open Assure Audit Website Log in to the system using user	The entire button with but ton text is clickable.	-	The entire button with button text is clickable.	PASS

	is	credentials.				
	clickable or	Open Customer				
	not.	OA.				
		Click on Add				
		new Button.				
		Click on				
		Upload Image				
		Button.				
T4	Verify that a	Open Assure	An error	-		
	complete err	Audit Website	message is			
	or	Log in to the	shown on			
	message is	system using	uploading an			
	shown on	user	image of the		An error	
	uploading	credentials.	maximum		message is	
	an image	Open Customer	allowed file		shown in the	
	of the	OA.	size.		Network tab	FAIL
	maximum	Click on Add			i.e., Request	
	allowed file	new Button.			Entity too	
	size.	Click on			large.	
		Upload Image				
		Button.				
		Select an				
		Image.				
T5	Verify	Open Assure	Invalid file	-		
	check is	Audit Website	type or			
	added for	Log in to the	extension.			
	uploading	system using				
	an image of	user			File is of	PASS
	an invalid	credentials.			Invalid type.	IASS
	file type or	Open Customer				
	extension or	OA.				
	not.	Click on Add				
		new Button.				

		Click on				
		Upload Image				
		Button.				
		Select a Zip				
		file.				
T7	Verify the	Open Assure	Invalid Email	testmaz		
	input field	Audit Website		ars.com		
	accepts	Log in to the		test@te		
	a valid	system using		st@maz		
	email	user		ars.com		
	address	credentials.		test.@m	<b>A</b> a	
		Open Customer		azars.co	As	PASS
		OA.		<u>m</u>	Expected,	
		Click on Add		.test.test		
		new Button.		<u>@mazar</u>		
		Enter Email in		s.com		
		the Email field.		test@m		
				<u>azars</u>		
T8	Verify	Open Assure	Invalid Phone	test		
	mobile	Audit Website	Number	967845		
	number field	Log in to the		6gbg		
	should	system using		+95637		
	accept only	user		4634		
	the numeric	credentials.			As	PASS
	value by	Open Customer			Expected,	IASS
	entering alp	OA.				
	habets.	Click on Add				
		new Button.				
		Enter Phone in				
		the Phone field.				

T9	Verify that a	Open Assure	An error	-		
	complete err	Audit Website	message is			
	or	Log in to the	shown on			
	message is	system using	uploading an			
	shown on	user	image of the		An error	
	uploading	credentials.	maximum		message is	
	an image	Open Customer	allowed file		shown in the	
	of the	OA.	size.		Network tab	FAIL
	maximum	Click on Add			i.e., Request	
	allowed file	new Button.			Entity too	
	size.	Click on			large.	
		Upload Image				
		Button.				
		Select an				
		Image.				

Table 7.2.4 Test cases for Supplier Setup

TC	Description	Steps	Expected	Input	Actual	TC
ID			Result	Value	Result	Result
T1	Verify Upload Image button is clickable or not.	Open Assure Audit Website Log in to the system using user credentials. Open Customer OA. Click on Add new Button. Click on Upload Image Button.	Upload Image button is clickable.	-	Upload Image button is clickable.	PASS
T2	Verify that a complete er ror message is shown on uploading an image of the maximum allowed file size.	Open Assure Audit Website Log in to the system using user credentials. Open Customer OA. Click on Add new Button. Click on Upload Image Button. Select an Image.	An error message is shown on uploading an image of the maximum allowed file size.	-	An error message i s shown in the Network tab i.e., Request Entity too large.	FAIL
Т3	Verify check is added for uploading an image of an invalid	Open Assure Audit Website Log in to the system using user credentials. Open Customer	Invalid file type or extension.	-	File is of Invalid type.	PASS

	file type or	OA.				
	extension or	Click on Add new				
	not.	Button.				
		Click on Upload				
		Image Button.				
		Select a Zip file.				
T5	Verify the	Open Assure	Invalid	testmazars.		
	input field	Audit Website	Email	com		
	accepts	Log in to the		test@test		
	a valid	system using user		@mazars.c		
	email	credentials.		om	Λ.α.	
	address	Open Customer		test.@maz	As	PASS
		OA.		ars.com.tes	Expected,	
		Click on Add new		t.test@maz		
		Button.		ars.comtest		
		Enter Email in the		@mazars		
		Email field.				
T6	Verify	Open Assure	Invalid	test		
	mobile	Audit Website	Phone	9678456gb		
	number	Log in to the	Number	g		
	field should	system using user		+95637463		
	accept only	credentials.		4	As	
	the numeric	Open Customer			Expected,	PASS
	value by	OA.			Expected,	
	entering alp	Click on Add new				
	habets.	Button.				
		Enter Phone in the				
		Phone field.				
T7	Verify that	Open Assure	An error	-	An error	
	a	Audit Website	message is		message i	
	complete er	Log in to the	shown on		s shown	FAIL
	ror	system using user	uploading		in the	
	message is	credentials.	an image		Network	

shown on	Open Customer	of the	tab i.e.,	
uploading	OA.	maximum	Request	
an image	Click on Add new	allowed	Entity too	
of the	Button.	file size.	large.	
maximum	Click on Upload			
allowed file	Image Button.			
size.	Select an Image.			

Conclusion and Discussion

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CHAPTER 8. CONCLUSION AND DISCUSSION

8.1 OVERALL ANALYSIS OF INTERNSHIP

BosLeo emphasis to create innovative technology-based solutions to add value to various

business domains such as customer engagement, finance, operations, and various

analytics for insight development to achieve strategic goals. They want to design

technology solution to accomplish Project brand value, make a compelling

product/service offer to attract customers, communicate value proposition, engage

customer with call to action, solve business problems and increase process efficiencies

across functional domains. BosLeois also known for its focus on varied range of

technologies as well as career development program which provide numerous learning

opportunities for interns.

8.2 PHOTOGRAPH OF SURPRISE VISIT BY INSTITUTE MENTOR

Visit 1:MAR 21, 2023

Visit 2: May 1, 2023

8.3 DATES OF CONTINUOUS EAVALUATION

Continuous Evaluation 1: MAR 9, 2023

Continuous Evaluation 2: MAY 3, 2023

8.4 PROBLEM ENCOUNTERED AND POSSIBLE SOLUTIONS

Problem: Using typescript was quite difficult as it was new for me.

Solution: Solved basic problems on various online platforms to improve the

understanding of the language.

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Problem: Debugging was quite complex, and I got stuck at it again and again.

Solution: Started to take smaller sections and focusing more on patterns.

Problem: Reusing components in Angular.

Solution: Started frequent practice on code reusability.

Problem: Creating dynamic designs.

Solution: Used Angular materials.

8.5 SUMMARY OF INTERNSHIP

analysis. The objective of the internship includes gaining proficiency in front-end framework i.e., angular, developing responsive web interfaces, and collaborating in a team environment. The purpose of the internship is to help gain industry-standard skills, understand the expectations, and demands of the industry, and develop the ability to work collaboratively and efficiently. The scope of the internship includes using front-end frameworks, designing, and implementing web interfaces, working with other team members, developing, and maintaining code libraries, and optimizing web interfaces for performance and accessibility. Also, it includes conducting research and analysis,

developing process maps and requirements documents, collaborating with developers,

managing project schedules and risks, and optimizing solutions for user experience and

This internship aims to provide practical experience in front-end development & business

usability.

8.6 LIMITATION AND FUTURE ENHANCEMENT

Limitation:

It is more useful for large scale organizations. However, for small scale business, it won't

be more useful.

## **Future Enhancement:**

We will try to configure it for all types of organizations and also include various features to make audit process more simpler and efficient.

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