Chapter 2

Project Plannification

Introduction

In this chapter, we dive into the analysis of our project's requirements, ...

2.1 Requirement Specification

The main objective of this section is cover the functional and non-functional requirements, actor identification and the Product Backlog.

2.1.1 Actor Identification

The actor is one of the most important element in our project, since he's the external entity interacting with the system through the interfaces it provides. When it comes to our project, there's one and only actor which is the **user** who we could also call the **auditor**. The static context diagram presented below illustrates the involvement of the main actor in our application.

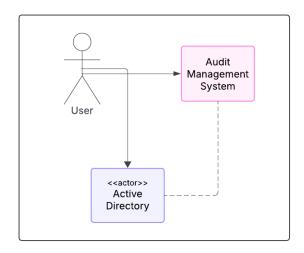


Figure 2.1 – Static Context Diagram

2.1.2 Functional Requirements

The functional requirements of our system define its core features as they outline the expected behaviors, user interactions, and system responses.

— Audit Management

- Creating, deleting and updating an audit
- Commenting and attaching documents to an audit
- Filtering and viewing audit history

— Audit Outcome Management

- Categorization and creation of audit outcome elements (Opportunity for improvement, strength, minor and major non confirmities and sensitive points)
- Filtering and viewing audit outcome history

— AI-Assisted Features & Risk Management

— Having data extracted from PDF and Excel files and filling out forms automatically

— Notifications & Tracking

- Receiving deadline and high risk alerts
- Viewing audit action logs

Access & Security

— Logging in via active directory

— Audit Reporting & Exporting

- Writing or generation custom reports
- Having monthly or full summary of reports
- Exporting reports in PDF format

— Collaboration & Communication

- Inviting teammates to collaborate on audits
- Managing collaboration requests

— Analytics & Dashboards

— Viewing charts and visual representations

— User Experience

- Having guides to learn how to use the application
- Submiting feedback

2.1.3 Non-Functional Requirements

Non-functional requirements define the quality standards for implementing functional needs. Our system must meet the following requirements:

- **Security**: Since the application handles confidential data, access to different areas must be restricted to only those within the company's active directory. the system must implement robust data encryption mechanisms to maintain security
- **Performance**: The system should minimize response times and ensure efficient execution of time-sensitive tasks for a seamless user experience.
- **Scalability**: The application should be designed to scale easily, accommodating an increasing number of users and products without performance degradation
- **Usability**: The interface should be intuitive and user-friendly, enabling a smooth and efficient user experience.

2.2 The Product Backlog

The Product Backlog serves as an organized and prioritized list of features required for the project, it acts as a guiding framework for the development team.

Below is a detailed description and an explanation of each column and how it contributes to managing the backlog effectively:

- **Feature ID**: A unique identifier for each feature
- **Feature**: A high-level description of the feature or functionality being developed
- **ID**: A sub-identifier for individual user stories or tasks within a feature
- User Story: A description of a requirement from the perspective of a user

- Business Value: Indicates the importance of the user story to the business
- **Complexity**: A numerical value representing the effort or difficulty required to implement the user story, estimated using the Fibonacci sequence (2 (easy), 5(simple), 8 (quiet complex), 13 (complex), 21(extremely complex)).

Featur	e Feature	ID	User Story	Business	s Complexity
ID				Value	
1	Access & Security	1.1	As an auditor, I want to log in via Active Directory for secure authentication.	High	8
2	Audit Management	2.1	As an auditor, I want to create an audit with the required details to track and manage the audit process.	High	8
		2.2	As an auditor, I want to modify the details of an existing audit to correct or add information.	High	5
		2.3	As an auditor, I want to delete an obsolete audit to maintain a clear and relevant record.	High	5
		2.4	As an auditor, I want to comment on audits so that I can submit feedback or highlight specific issues.	Medium	5
		2.5	As an auditor, I want to attach documents to audits to centralize relevant information.	Medium	5
		2.6	As an auditor, I want to view audit details, including its outcomes, comments, and corrective actions, for comprehensive management.	High	2

Feature	e Feature	ID	User Story		sComplexity
ID				Value	
		2.7	As an auditor, I want to filter audits by status, type, or due date so that I can quickly locate and review the audits.	Medium	5
		2.8	As an auditor, I want to view all scheduled audits on a calendar to effectively manage my schedule.	High	5
		2.9	As an auditor, I want to view the history of completed audits and their details so I can keep track of past assessments.	Medium	2
3	Audit Out- come Manage- ment	3.1	As an auditor, I want to choose one or multiple outcomes of an audit so that I can accurately document the results and implications of the audit.	High	5
		3.2	As an auditor, I want to record OFI with perspectives, impacted assets, and corrective action plans so that I can improve processes.	High	5
		3.3	As an auditor, I want to categorize non-conformities as major or minor for risk assessment.	High	5

Feature	Feature	ID	User Story	Busines	sComplexity
ID				Value	
		3.4	As an auditor, I want to record non-conformities with descriptions, affected assets, and corrective action plans so that I can track issues and ensure corrective actions are taken to improve compliance.	High	5
		3.5	As an auditor, I want to record an audit's strength points so that I can highlight strong areas that contribute to process efficiency and best practices.	High	2
		3.6	As an auditor, I want to record an audit's sensitive points so that I can highlight vulnerabilities that require special attention.	High	2
		3.7	As an auditor, I want to create sub-actions for each non-conformity to address and resolve issues effectively.	High	5
		3.8	As an auditor, I want to view the history of audit outcomes so that I can analyze trends, track improvements, and identify recurring issues over time.	Medium	4
		3.9	As an auditor, I want to filter outcomes to focus on relevant audit findings.	Medium	3

Feature	e Feature	ID	User Story		$\overline{\text{sComple}}$ xity
ID				Value	
		4.1	As an auditor, I want AI	High	21
			to extract key		
			information from		
	AI Assisted &		uploaded documents to		
4	Automated Fea-		streamline audit		
	tures		processing.		
		4.2	As an auditor, I want to	High	8
			automate the extraction		
			of data from an Excel		
			file and fill out a form		
			with the extracted data,		
			so that I can save time		
			and minimize errors in		
			manual data entry.		
		5.1	As an auditor, I want to	Medium	2
			write detailed audit		
			reports for		
	Audit Report-		documentation and		
5	ing & Export-		regulatory compliance.		
	ing	5.2	As an auditor, I want to	Medium	2
			customize reports by		
			selecting the data to		
			include		
			(non-conformities,		
			corrective actions, etc.)		
			and the application to		
			automatically generate		
			audit reports, to save		
			time.		
		5.3	As an auditor, I want to	High	2
			export audit data in		
			PDF format for		
			reporting and analysis.		
		5.4	As an auditor, I want to	Medium	5
			choose between a		
			monthly summary or the		
			full summary of audits		
			to have an overview of		
			my activities.		

Feature	Feature	ID	User Story	Business	Complexity
ID				Value	
		5.5	As an auditor, I want to	Medium	5
			export my summary of		
			audits to review and		
			analyze audit findings		
			efficiently.		
		6.1	As an auditor, I want	High	8
			automated notifications		
			for upcoming audit due		
	N:C .:		dates so that I can stay		
6	Notifications		informed and take		
	& Tracking		timely action.		
		6.2	As an auditor, I want an	Low	5
			audit trail that logs all		
			actions for compliance		
			and traceability.		
		4.3	As an auditor, I want to	Medium	5
			be alerted of flag		
			high-risk audits (with		
			major non-conformities)		
			for immediate attention.		
		7.1	As an auditor, I want to	Low	5
			share audits with other		
			teammates to facilitate		
	Collaboration		collaboration.		
7	& Communi-	6.1	As an auditor, I want to	Low	5
	cation		accept or decline		
			collaboration requests to		
			control my involvement		
			in audits.		
		8.1	As an auditor, I want a	Low	8
			dashboard displaying		
			visual representations of		
	D 11 1 0		audit statuses by type,		
8	Dashboard &		so that I can assess		
	Analytics		performance trends and		
			identify areas for		

6.2 As an auditor, I charts that illus trends in audits their outcomes a so that I can de patterns, assess and enhance constrategies. 9.1 As a user, I wan to an integrated	strate
charts that illus trends in audits their outcomes I so that I can de patterns, assess and enhance con strategies. 9.1 As a user, I war	strate
,	by type, etect risks,
9 User Experience Experience guide to learn house the platform 9.2 As a user, I war submit feedback suggestions to in	d user now to n. Low 2

Table 2.1 – Product Backlog

2.3 Development Environment