

UNIT STANDARD TITLE					SAQA US ID	
Write a technical report					116389	
Date	Learner Name	Learner Signature	Facilitator Name	Facilitator Signature	Assessor Name	Assessor Signature

Project Plan for JES(JumpCO Employment System)

Distribution:

<Organization., Name>

Appendices:

<Appendix 1>

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1. Overview

The overview and motivation of the JES (JumpCO Employment System) is to bridge the gap within the JumpCO company, to help the company manage their recruitment process more efficiently, transparent and effectively. The structure of the Company involves Seniors and Interns, where interns are able to directly view available positions within the company upon completion or during their Internship term, thus assists in the smooth transition of interns from the hiring process to becoming active employees, and so are seniors able to view available positions, without any misunderstandings of which positions are open and from which Department or given Company. This System adds efficiency to the existing website to enable Management to store and organize candidate profiles and information in a centralized database. The project will cost the company R546 820.00 and will take 4 months to complete.

2. Goals and Scope

2.1 Project Goals

- Provide employees with an efficient system during internal recruitment processes, aligned with the company's overall objectives.
- Recognizing the skills and potential of the internal employees and putting them to use.
- Encouraging ongoing learning and development within the company.
- Providing an environment for career growth opportunities which enhances their skills and competencies.
- Boosting employee morale and job satisfaction by offering advancement opportunities.
- Showing a commitment to the professional growth of existing employees.
- Recruitment could be time consuming and expensive, save time to reach all candidates within the company, to quickly identify candidates based on skills, earned skills within the company and other job requirements.
- Collaborate with existing sponsors and partners, which could potentially employ from or through JumpCO.

Project Goal	Priority	Comment/Description/Reference
Functional Goals:	2	For details see the Project Requirements Specification [2]
Internal Job Posting	1	Inform employees about available positions by posting and promotion of internal job opportunities, while encouraging them for roles that match their skills and career goals.
User friendly Interface	1	Provide a user-friendly interface for the hiring managers and employees, which enhances the overall user experience, making it easy for users to navigate and utilize the system.
Automated Notifications / Alerts	1	Automate or set notifications and alerts about available positions, upcoming interviews to the applicants, and feedback requests.
Centralized Candidate Database	1	Maintain a centralized database of employee profiles, skills and career histories, which ensures easy access to employee information for recruiters and hiring managers.
Skills and Competency Tracking	1	Enables recruiters to quickly identify internal candidates with the required skills for available job openings.
Business Goals:		
Eliminate word of mouth on available positions	1	Provide the Hiring Managers and Employees with a recruitment System which will alert employees on available positions.
Cost Efficiency	1	Minimize external recruitment process and advance internal recruitment process to minimize costs.
Continuous Improvement	1	Continuously enhance the JumpCO Employment System

Project Goal	Priority	Comment/Description/Reference
		and/or recruitment process by collecting feedback and analyzing feedback from users and use it to implement improvements to ensure ongoing effectiveness and efficiency.
Adaptability and Scalability	1	Build a flexible and scalable recruitment system that adapts to the evolving recruitment needs for the Company, HR managers and Employees.
Employment Engagement	1	Enhance employee engagement, support career development and communicate effectively with employees about career paths and opportunities.
Technological Goals:		
MySQL	1	Where all data will be stored.
HTML 5, CSS, JavaScript	1	Designing Frontend
Java	1	Designing Backend
SpringBoot	1	Framework
Quality Goals:		
Accurate Candidate Match	1	Ensure accurate match of candidate skills and qualifications with job requirements.
User-Friendly Interface	1	Provide a user-friendly system. Conduct
Employment Engagement	1	Encourage employees to actively pursue career growth within the company.
Transparent Recruitment Processes	1	Clearly communicate the requirements for internal job opportunities, with transparent selection procedures.
Constraints:		
Time	1	We will need continuous improvement.
	1	
	1	

2.2 Project Scope

The sole purpose of this project is to promote internal mobility of the recruitment processes within the Company as well as enhance succession planning and improving employee development and engagement.

- Improve efficiency and effectiveness of internal recruitment processes.
- Facilitate better communication and engagement within the company.
- Centralize and automate job postings.

2.2.1 Included

- Design and develop a user-friendly web-based Internal Recruitment System.
- Implementation of a centralized database for candidate profiles, resumes and HR managers database.
- Automate or set notifications and alerts about available positions, upcoming interviews to the applicants, and feedback requests.

2.2.2 Excluded

- External recruitment processes are outside the scope of this project.

	Nabeela Heske	
	Tholakele Dube	Will be the full stack developer for the system.
	Thato Morutudi,as and Nthabiseng Masia	Will be the Database administrators
Technology	Java	The language that will be used to develop the employment system

3.1.3 Sub-contractors

*Help: A **Sub-contractor** is an external organization that is contracted to provide the project with a specified product, knowledge or service.*

Sub-contractors are defined in the sub-contract management in section 8.

3.1.4 Suppliers

*Help: A **Supplier** is an external organization contributing to the project with an existing product (COTS = Commercial Off The Shelf) that is incorporated into a project deliverable (e.g. a database system) or used for project support (e.g. tool, equipment). Identify all external suppliers and their deliverables. State any special arrangements or procedures that will be used in contacts with the suppliers. Name contacts, if applicable.*

Company: Contact	Deliverable	Comment

3.1.5 Cross Functions

Help: Identify all functions within the organization that are involved in/contribute to the project.

Function	Dept.: Contact	Responsibility/Comment
Product Mgmt		
Marketing		
Sales		
Service		
Training		
Manufacturing		
Quality		
Technology		
Supply Mgmt		

3.1.6 Other Projects

Help: Specify the interface to other projects. Identify the relevant dependencies in terms of deliveries to or from the project, and usage of the same resources.

Project	Org.: Project Mgr	Dependency	Comment

Project	Org.: Project Mgr	Dependency	Comment

3.2 Project Organization

- *Mnelisi Mbonani, as the lead developer, Technical project manager, and back-end developer.*
- *Thato Mphahlele, as the front-end developer*
- *Nabeela Heske, will be the front-end developer*
- *Tholakele Dube, will be the full stack developer for the system.*
- *Nthabiseng Masia, as the backend developer and database administrators*
- *Thato Morutudi, as the backend developer and main database developer*

1.1.1 Project Manager

Role	Organization: Name
Project Manager	Mnelisi Mbonani
Technical Project Mgr.	Mnelisi Mbonani

3.2.1 Project-internal Functions

Function	Organization: Name	Comment
Quality Assurance		
System Test Lead		
Validation Lead	Nabeela Heske	
Configuration Mgmt	Thato Morutudi	
Change Mgmt	Tholakele Dube	
etc.		

3.2.2 Project Team

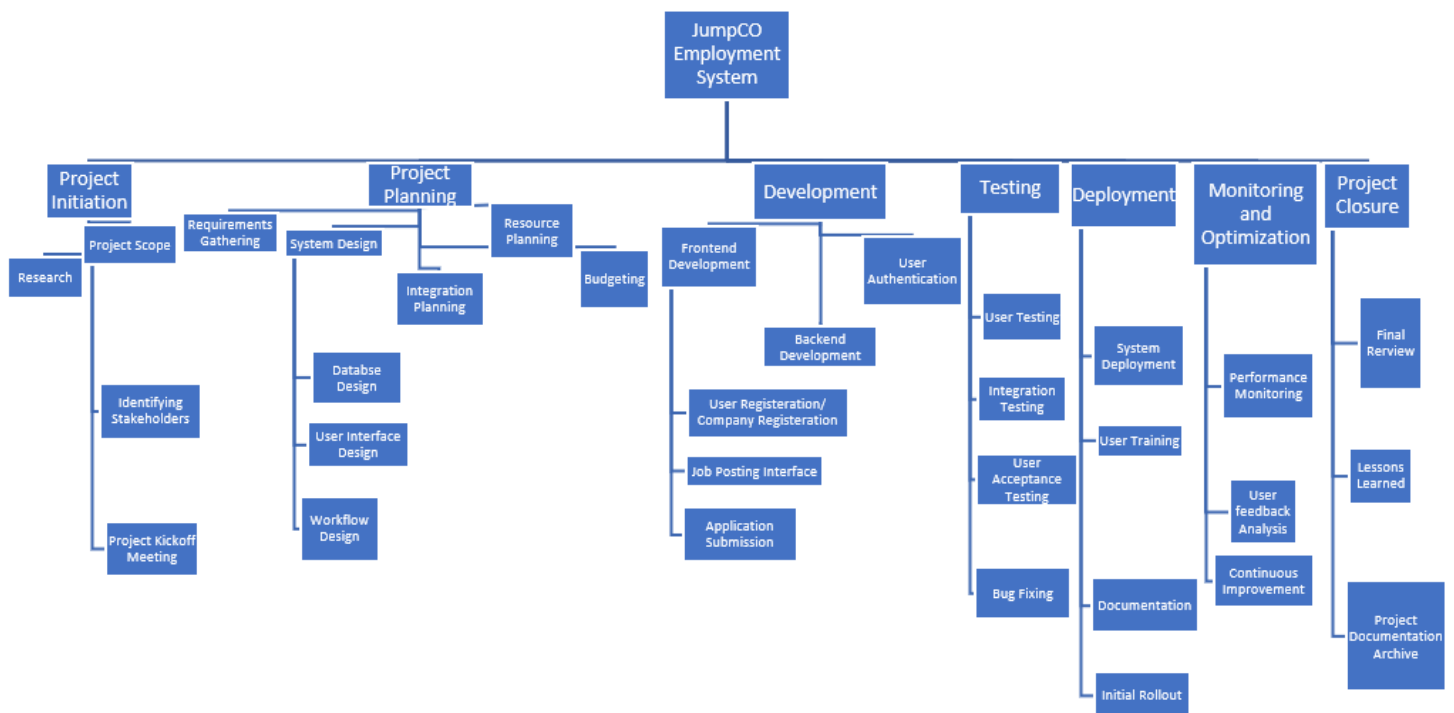
Organization: Name	Availability	Comment
Mnelesi Mbonani	Full=Time	Available all the time
Nabeela Heske	Full=Time	Available all the time
Thato Morutodi	Full=Time	Available all the time
Thato Mphahlele	Full=Time	Available all the time
Nthabiseng	Full=Time	Available all the time

3.2.3 Steering Committee

The Steering Committee (SteCo) of the project is responsible for

The SteCo consists of the following members:

Organization	Name	Comment
Budget	Mnelisis Mbonani	Will be managing the budget for the project
Deadlines	Nabeela Heske	Will be responsible for all the deadlines and make sure that they are met.



4. Schedule and Budget

4.1 Work Breakdown Structure

4.2 Schedule and Milestones

Milestones	Description	Milestone Criteria	Planned Date
M0	Project Initiation	Budget Release	2024-01-12

	Define Project goals and scope Identify Stakeholders Project Kickoff Meeting	PRS or SRS reviewed Stakeholders identified. Proposal reviewed	2024-01-15 2024-01-17 2024-01-19
M1	Project Planning		
	Requirements gathering System Design: Database Design User Interface Design Workflow Design Integration Planning Resource Planning Budgeting	Scope and concept described	2024-01-21 2024-01-24 2024-01-26 2024-01-28 2024-01-30 2024-01-31 2024-02-01
M2	Development		
	Frontend Development: Backend development User Authentication	Requirements agreed, project plan reviewed, resources committed	2024-02-03 2024-02-03 2024-03-12
M3	Testing		2024-04-25
	Unit Testing Integration Testing User Acceptance Testing Bug Fixing	Architecture reviewed and stable	2024-04-25 2024-04-29 2024-05-01 2024-05-05
M4	Deployment		
	System Deployment User Training Documentation Initial Rollout	Coding of new functionality finished, Draft documentation	2024-05-12 2024-05-15 2024-05-16 2024-05-20
M5	Monitoring and Optimization		
	Performance Monitoring User Feedback Analysis Continuous Improvement	Product system tested, documentation reviewed.	2024-05-25 2024-05-30 2024-06-05
M6	Close Project		2024-06-10

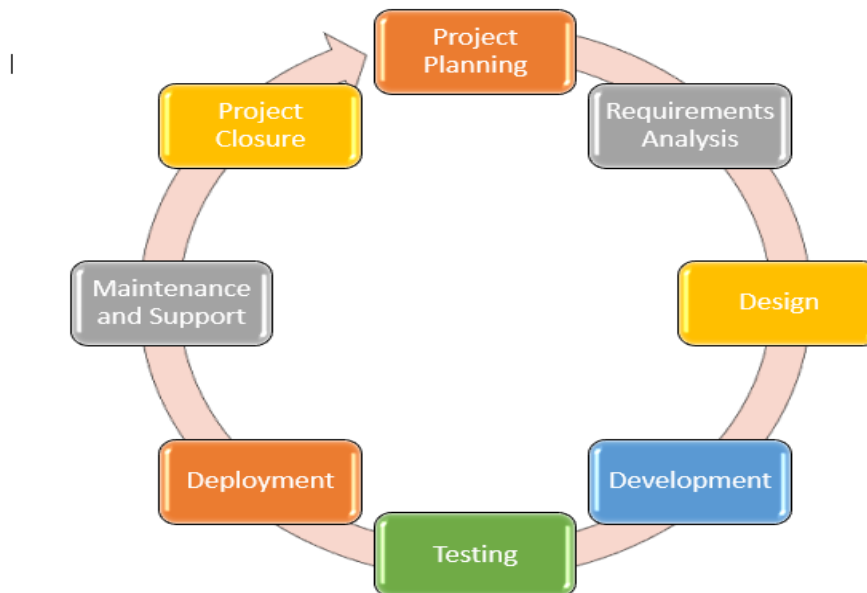
4.3 Budget

Category	Budget for Period in kUS\$					
	M0-M1	M1-M2	M2 - M3	M3-M4	M4 - M5	M5-M6
Element	Element Description	2024	20	2026	20	2028

Category	Budget for Period in kUS\$					
	M0-M1	M1-M2	M2 - M3	M3-M4	M4 - M5	M5-M6
			25		27	
Personal Costs Project Manager: System Analyst: Software Developers: Quality Assurance Specialists: Training and Documentation Specialists:	Investments made by users or developers, such as time, effort, and expertise in using or creating the software.	R231,497.00 R101,562.00 R1,933,500.00 R210,000.00 R204,069.00				
Total Personal Costs		R2,680,628.00				
Development Costs Frontend Development: Backend Development:	Costs in the concept of hardware or software during the creation of a software system.	R30,000.00 R50,000.00				
Total Development Costs		R80,000.00				
Testing Costs Unit Testing: Integration Testing: User Acceptance Testing:	The expenses associated with verifying and validating the functionality, performance and reliability of a software system.	R60,000.00 R100,000.00 R101,234.00				
Total Testing Costs		R261,234.00				
Deployment and Training Costs: System Deployment: User training: Documentation:	Costs in the concept of software implementation, expenses associated with rolling out the software to end-users and ensuring they are proficient in using it.	R22,000.00 R204,657.00 R50,000.00 R24,765.00				
Total Deployment and Training Costs		R301,422.00				
Infrastructure and Technology Costs Software: Hardware:	Expenses associated with the foundation elements	R34,876.00 R53,980.00				

Category	M0-M1	Budget for Period in kUS\$				
		M1-M2	M2 - M3	M3-M4	M4 - M5	M5-M6
Integration Costs:	necessary for developing, deploying and maintaining technology solutions.	R80,657.00				
Total Infrastructure and Technology Costs		R169,513.00				
Total accumulated		R3,492,797.00				

4.4 Development Process



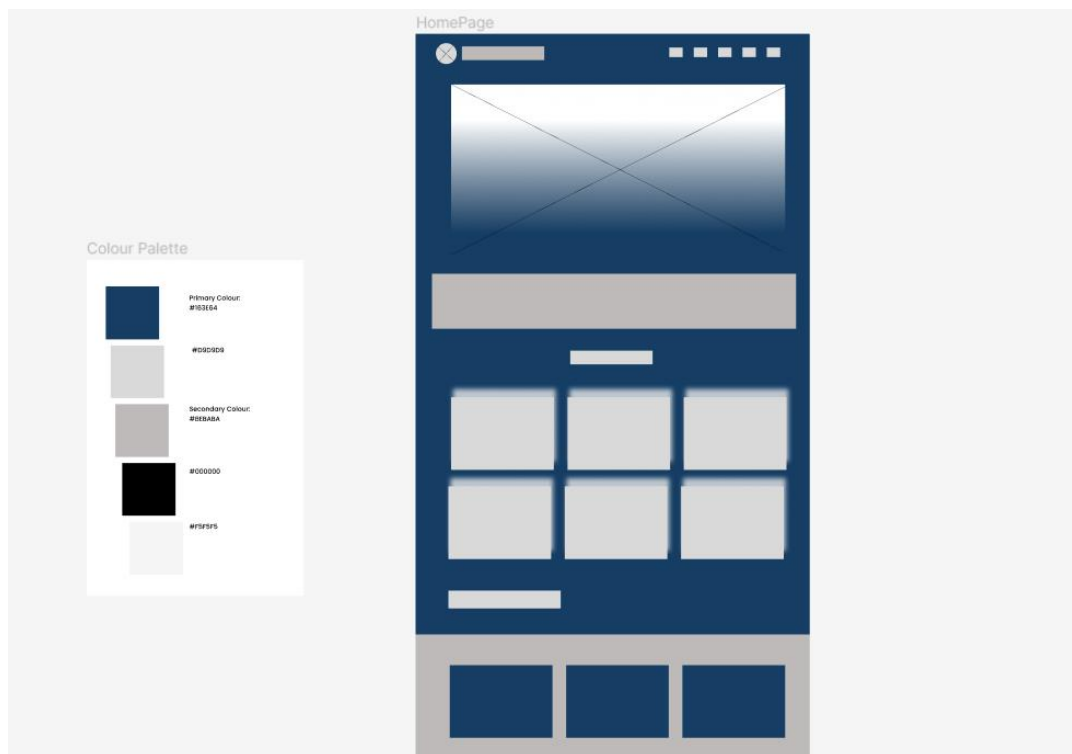
4.5 Development Environment

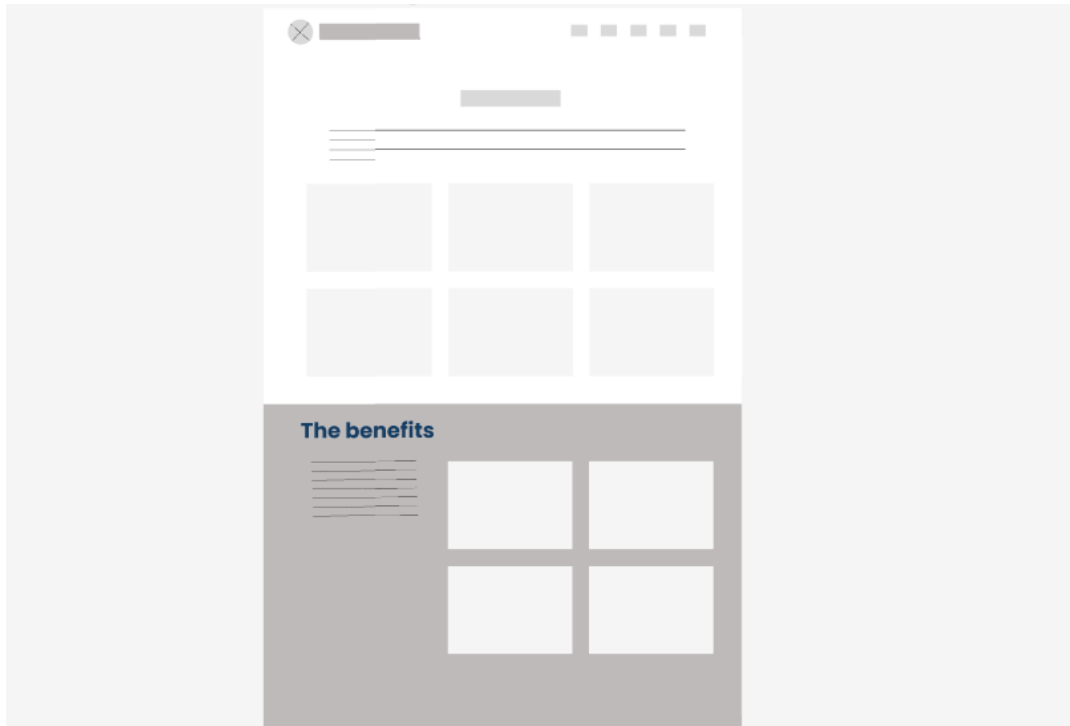
Item	Applied for	Availability by
Methods		
Use Case	Requirements capturing	2024-03-23
UML Diagrams	Designing user interaction to the system.	2024-03-23
Visual Studio, Git	Design/Code	
Tools		
SQL Server Management	Design database	2024-03-28
MySQL	Database Design	2024-04-28
Languages		

Item	Applied for	Availability by
UML	Design	2024-05-03
Java	Web interface	2024-05-03
JavaScript, HTML5, CSS	Design	2024-05-03

4.6 Measurements Program

Type of data	Purpose	Responsible
<# changed requirements>		Q-Responsible
<# defects found before M4>		Q-Responsible
<performance data>	to assess the achievement of project requirements	Test lead





5. Risk Management

6. Risk management is a critical aspect of ensuring the successful development and deployment of the JumpCO Employment System. In this project, the responsibility for managing risks lies with the Project Manager. The initial step in risk management involves the identification, documentation, and assessment of potential risks. The Project Manager maintains a comprehensive Risk Management Plan (RMP) or Risk Sheet, which serves as the central repository for all identified risks. This document includes details such as the nature of the risk, its potential impact on the project, and an assessment of its likelihood.
- 7.
8. Upon identification, the risks are prioritized based on their severity and likelihood of occurrence. The Risk Management Plan also outlines specific mitigation and contingency measures for each identified risk, with clear indications of who is responsible for implementing these actions. Regular updates to the Risk Management Plan occur on a monthly basis or in response to significant project events. Additionally, the Project Manager communicates the status of identified risks to all relevant stakeholders, ensuring that the entire project team is aware of the potential challenges and corresponding risk management strategies. The monthly Project Report includes a dedicated section on risk status, providing transparency and accountability to line management and other key stakeholders. This proactive approach to risk management ensures that potential issues are addressed promptly and contributes to the overall success of the JumpCO Employment System development.

9. Sub-contract Management

Sub-contractor	Sub-contracted Work	Ref. to Sub-contract
Company	Contact	
Software Solutions	Smith	Software Development and Database Management
Quality Assurance Services	John	Quality Assurance and Testing
WebDesign Experts Ltd.	Mark Johnson	User Interface Design and Frontend Development

In adherence to effective subcontract management, a detailed subcontractor agreement has been established for each outsourcing arrangement. The agreement comprehensively covers essential elements to ensure clarity and alignment between JumpCO and the subcontractors. The statement of work outlines the specific tasks, responsibilities, and deliverables expected from the subcontractor. The execution process is defined, encompassing milestones that serve as critical progress markers.

Quality assurance and configuration management are integral components, ensuring that the subcontracted work meets the specified standards. The communication structure is outlined to facilitate seamless collaboration between JumpCO and subcontractors, and a clear hand-over procedure is defined for smooth transitions. Acceptance criteria are established to validate the successful completion of subcontracted tasks, and regular quality audits are conducted to maintain the desired level of performance.

Each subcontracting arrangement is uniquely referenced within the table, making it easy to cross-reference specific details outlined in the respective subcontractor agreements. This meticulous approach to subcontract management ensures transparency, accountability, and the successful integration of specialized services into the development of the JumpCO Employment System.

10. Communication and Reporting

Internal Communications	Method / Tool	Frequency/ Schedule	Information	Participants / Responsibles
Project Meetings	Video Conferencing (e.g., Zoom)	Bi-weekly	Project Progress, Issues, and Planning Discussions	Project Manager, Development Team, QA Team, Design Team
Project Information Availability	Project Library (Online Repository)/ Git	Continuous	Project Documentation, Reports, and Reference Materials	Project Team, Management
Sub-project and Sub-contractor Reports	Weekly Status Reports via Email/ Whatsapp GC	Weekly	Progress Updates, Issues, and Risk Reports	Sub-project Managers, Sub-contractors, Project Manager

Milestone Meetings	In-person or Video Conferencing	As Needed based on Milestone Achievements	Milestone Achievements, Challenges, and Next Steps	Project Manager, Relevant Team Leads
Event Communication	Email and Project Communication Platform	As Events Occur	Event Details, Impact on Project, and Action Plans	Project Team, Project Manager
External Communication and Reporting	Method / Tool	Frequency/ Schedule	Information	Participants / Responsibles
Stakeholder Information Provision	Monthly Project Reports via Email	Monthly	Project Status, Achievements, and Upcoming Plans	External Stakeholders, Project Manager, Management
Stakeholder Meetings	Virtual or In-person Meetings	Quarterly	Strategic Discussions, Feedback, and Q&A Sessions	External Stakeholders, Project Manager, Management
Steering Committee (SteCo) Meetings	Video Conferencing (e.g., Zoom)	Bi-annual	High-Level Project Overview, Strategic Decisions	External Stakeholders, Project Manager, Steering Committee

This structured communication plan ensures that both internal and external stakeholders are well-informed and engaged throughout the project. It establishes clear channels, methods, and frequencies for disseminating information, facilitating effective collaboration and decision-making within the JumpCO Employment System development.

11. Delivery Plan

11.1 Deliverables and Receivers

Help:

Ident.	Deliverable	Planned Date	Receiver
D1	Java Application - JumpCO Employment System	TBD	Internal Development Team, Quality Assurance
D2	Database Schema and Design Documentation	TBD	Database Administrators, Development Team
D3	User Interface Design and Wireframes	TBD	Design Team, Frontend Developers

This comprehensive list of deliverables covers both technical aspects, such as the development of the Java application and associated documentation, and non-technical aspects, including marketing material, training material, and management presentations. Each

deliverable is associated with a planned delivery date, ensuring a systematic and timely release of key project outputs. The receivers of each deliverable are clearly identified, ensuring that the right stakeholders receive the relevant information and materials at the appropriate stages of the project.

12. Configuration and Change Management

Configuration and change management play crucial roles in maintaining the integrity and stability of the JumpCO Employment System throughout its development lifecycle. This section outlines the key principles and processes related to configuration and change management:

12.1 Configuration Management:

Configuration Identification:

Every project component, including code, documentation, and system configurations, is uniquely identified and labeled. This includes versioning for software components to track changes effectively.

Configuration Control:

A configuration management plan is in place to control changes systematically. Only authorized personnel can modify configurations, and changes are documented, reviewed, and approved before implementation.

Configuration Status Accounting:

Regular audits are conducted to maintain an accurate record of the status of all configuration items. This includes tracking changes, their approval status, and current versions.

Configuration Audits:

Periodic configuration audits are performed to ensure alignment with the configuration management plan and to identify and rectify any inconsistencies.

12.2 Change Management:

Change Request Process:

A formal change request process is established to capture, evaluate, and prioritize proposed changes. This process includes a change request form, outlining the nature of the change, its impact, and justifications.

Change Evaluation:

Changes are assessed for their impact on project scope, schedule, and resources. The change evaluation process involves relevant stakeholders to ensure a comprehensive understanding of potential consequences.

Change Approval:

Changes are subject to a change control board (CCB) or a designated approval authority. The CCB reviews change requests, considering their impact and feasibility, before granting approval.

Change Implementation:

Approved changes are implemented according to a structured plan. This involves updating documentation, modifying code, and ensuring that all relevant stakeholders are informed of the changes.

Change Verification and Validation:

After implementation, changes undergo verification and validation to ensure that they meet the intended objectives and do not introduce new issues. This involves testing and thorough review processes.

12.3 Integration with Other Processes:

Integration with Quality Assurance:

Configuration and change management processes are closely integrated with quality assurance practices to ensure that changes do not compromise the overall quality of the project deliverables.

Continuous Monitoring and Improvement:

Regular monitoring of configuration and change management processes is conducted, and lessons learned are documented. Continuous improvement initiatives are implemented based on feedback and experiences.

12.4 Communication and Training:

Stakeholder Communication:

Changes to the configuration or project scope are communicated to relevant stakeholders promptly and transparently. This ensures that all parties are aware of modifications and their implications.

Training Programs:

Training programs are implemented to ensure that project team members are well-versed in the configuration and change management processes. This includes guidance on submitting change requests and understanding the impact of changes.

By adhering to these configuration and change management principles, the JumpCO Employment System project aims to foster stability, enhance traceability, and effectively respond to evolving requirements, thereby contributing to the overall success of the project.

13. Security Aspects

Security is a paramount consideration in the development of the JumpCO Employment System. The following outlines key security measures and procedures to ensure the confidentiality, integrity, and availability of project information:

13.1 Classification of Project Information: **Integrity, Availability, and Confidentiality:**

Project information is classified based on its sensitivity with regard to integrity, availability, and confidentiality. This classification aligns with the organization's group directives on security.

Handling Sensitive Information:

Specific protocols are in place for handling sensitive information. Access controls are implemented to restrict access only to authorized personnel, and encryption is employed for the transmission of sensitive data.

13.2 Security Requirements Fulfillment: **Security Agreements with Suppliers and Partners:**

Security agreements are established with suppliers and partners to ensure that security standards are maintained throughout the supply chain. These agreements outline expectations, responsibilities, and compliance measures.

Security Checks for Project Team Members:

All project team members undergo security checks to verify their background, ensuring that individuals handling sensitive information have the necessary clearance and integrity.

Security Audits of Equipment:

Regular security audits of project equipment, including hardware and software components, are conducted to identify vulnerabilities and ensure compliance with security standards.

Usage of Coded Information:

Information that requires an additional layer of protection is coded or encrypted. This includes sensitive documents, communication, and any data transmitted between system components.

13.3 Authorization of Information Distribution and Publishing: **Decision-Making Authority:**

The decision regarding the distribution of information is centralized and delegated to specific roles within the project team. The Project Manager, in collaboration with relevant stakeholders, determines who should have access to particular information.

Access Control Measures:

Access controls are implemented to restrict information distribution based on predefined authorization levels. Only individuals with the appropriate clearance are granted access to specific categories of information.

13.4 Monitoring Security: **Continuous Monitoring:**

Security measures are continuously monitored throughout the project lifecycle. Regular assessments and audits are conducted to identify and address potential security vulnerabilities promptly.

Incident Response Plan:

An incident response plan is established to guide the project team in the event of a security incident. This plan includes predefined procedures for identifying, containing, eradicating, recovering, and learning from security incidents.

11.5 Reporting Security Incidents: **Structured Reporting Procedures:**

Clear and structured procedures are defined for reporting security incidents. Team members are encouraged to report any security concerns promptly through designated channels.

Incident Documentation:

Detailed documentation of security incidents is maintained. This includes the nature of the incident, the impact, actions taken, and lessons learned for continuous improvement.

14. Abbreviations and Definitions

Below is a list of abbreviations and their corresponding definitions used within this document:

CCB: Change Control Board

CI: Configuration Item

CM: Configuration Management

COTS: Commercial Off The Shelf
 CR: Change Request
 CRM: Change Request Management
 ID: Identification, Identifier
 IP: Intellectual Property
 QA: Quality Assurance
 SteCo: Steering Committee
 V&V: Verification and Validation

These abbreviations and definitions are employed to enhance clarity and understanding throughout the documentation related to the JumpCO Employment System project. They serve as a reference for project team members and stakeholders, ensuring effective communication and alignment on key terms and concepts.

15. References

Help: List all other documents this document refers to.

- [1] <Doc. No.> Project Proposal for <project name>
- [2] <Doc. No.> Project Requirements Specification for <project name>
- [3] <Doc. No.> Implementation Proposal for <project name>
- [4] <Doc. No.> Project Schedule for <project name>
- [5] <Doc. No.> Risk Management Plan for <project name>
- [6] <Doc. No.> Work Breakdown Structure for <project name>
- [7] <Doc. No.> Quality Assurance Plan (if it is a separate plan)
- [8] <Doc. No.> Configuration Management Plan (if it is a separate plan)
- [9] <Doc. No.> <Sub-contract #1>
- [10] <Doc. No.>

16. Revision

Rev. ind.	Page (P) Chapt. (C)	Description	Date Dept./Init.
-	---	original version	