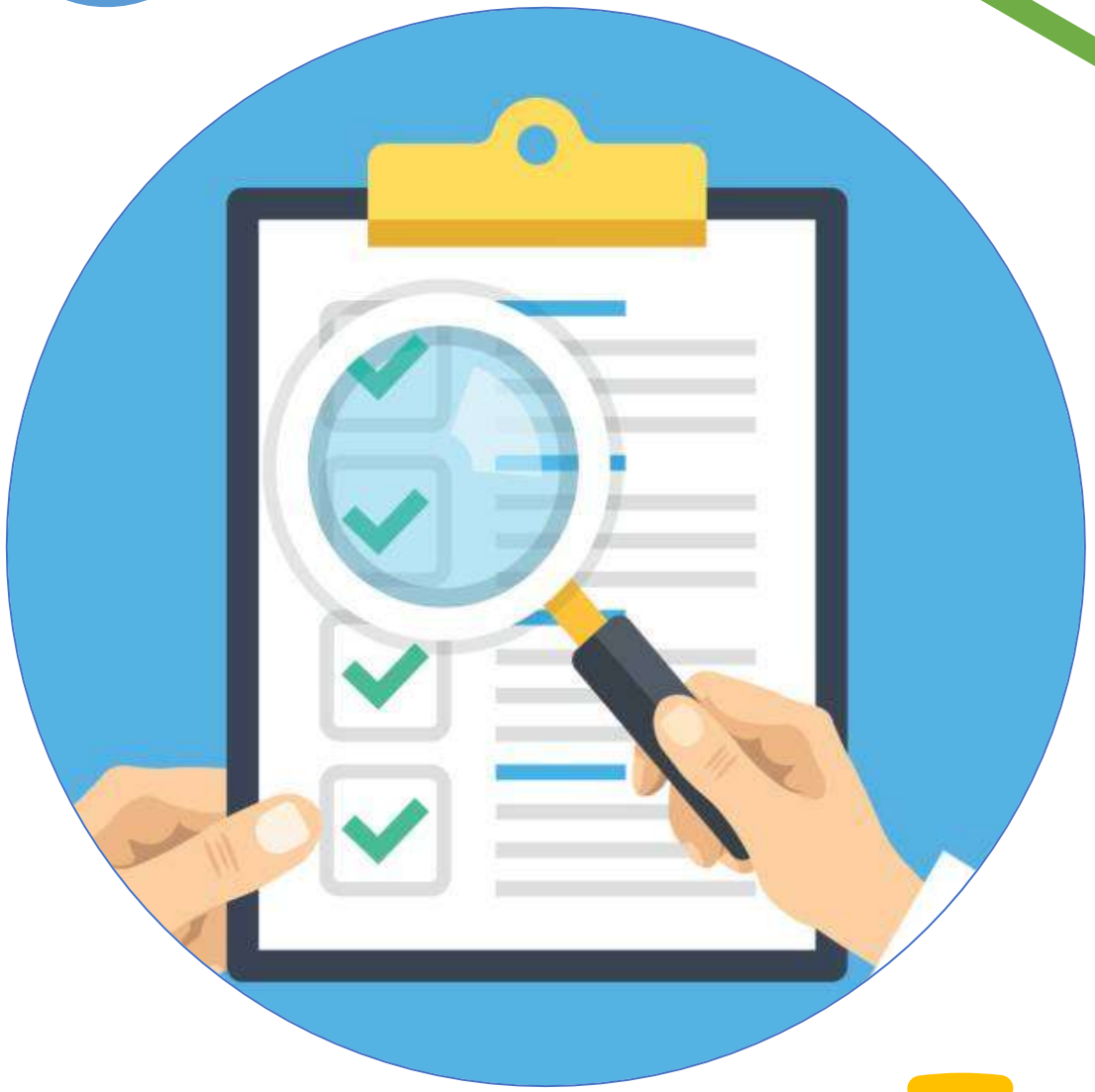


Quality Check of Engineering Documents

Project Plan – Ingenia

Group 2

Vinit Dave

Sindhuja Reddy

Li Guan

Sujan Gaha Magar

Madeline Goldy

Agenda

- Project Background and Description
- Project Scope
- Risks
- Budget
- Roles and Responsibilities
- Communications Plan
- Project Stakeholders
- Deliverables and Project Evaluation Criteria
- Implementation Plan

Project Background and Description

Ingenia: Client-focused consulting company

Quality Check of Engineering Documents Initiative

Project's Organizational Importance

Project's Objectives and Benefits

AS IS Process

- Manual Quality Assessment
- Reviewer Dependency
- Limited Automation
- Documentation Challenges
- Collaboration Hurdles
- Reporting Bottlenecks

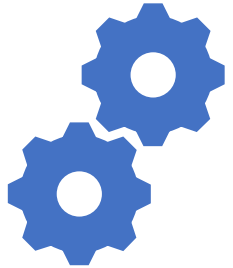
TO BE Process

Digitalization of Quality Checklist

Tool Selection

Wireframe Creation

User-Centric Design



Research on Automation of Checklist Tasks

Thorough Automation Exploration

Feasibility and Applicability Analysis

In-Depth Documentation and Recommendations

Project Scope

Inclusions

User-centric digital checklist via Figma wireframes.

Comprehensive automation technology research with documented findings.

Recommendations & solution design documentation.

Exclusions

Limited automation implementation (focus on research and recommendations).

No integration of dashboard with Drawboards.

Risks

Risk	Probability (out of 100%)	Impact	Mitigation Strategy
Lack of technical expertise	70%	High	Research, mentor guidance, contact clients and having regular meetings, dividing tasks based on strengths.
Misalignment with project goals	20%	High	Regular alignment checks with mentors and clients, clear documentation of goals and requirements.
Changes in the project scope	20%	Medium	Re-negotiating project scope, consulting with mentors.
Client's availability	20%	High	Reach out to a representative
Unexpected circumstances	10%	Medium	Seek mentor advice, have a risk management plan in place
Unavailability of data	10%	High	Identify alternate data sources, make necessary adjustment to project plan

Budget

Budget Item	Estimated Cost	Justification
Software Development Resources	$25,000	Allocation for skilled developers, UX/UI designers, and QA (Quality Assurance) testers to create the application.
Server Hosting and Maintenance	$5000	Provisioning and maintaining servers for hosting the application, ensuring reliability and security.
Integration with Drawboard Projects	$3000	The cost associated with integrating the app with Drawboard, expanding collaboration capabilities.
Quality Assurance and Testing	$6000	Investment in rigorous testing to ensure the application's functionality, security, and user experience.
User Interface/Experience Enhancement	$4000	Budget for refining the app's design, optimizing user flows, and ensuring an intuitive user experience.

Roles & Responsibilities

Role	Student	Responsibility	Rationale
Requirements Analyst	Madeline Goldy	Collecting and analysing requirements	Strong analytical and communication skills
Documentation & Process Analyst	Sindhuja Reddy	Document all processes, findings, and strategies, ensure clarity and coherence in documentation, review and revise as necessary	Ensures thorough and coherent documentation of all processes.
Prototyping Specialist	Li Guan	UI design, proof-of-concept/mock-up with Figma	Creative mindset and experience in UI design tools
Research and Development Lead	Sujan Gaha Magar	Conduct in-depth research on OCR and digitalization, guide the team on technical aspects.	Background in engineering and research, apt for understanding OCR and digitalization.
Project Manager & Workflow Designer	Vinit Dave	Project coordination, swim lanes diagram	Leadership qualities and ability to oversee multiple aspects

Communication Plans

1. Client Communication

- Purpose: To update the client on project status, gather feedback, and align on expectations.
- Method: Zoom call, email updates, formal reports.
- Frequency: Bi-weekly meetings, monthly reports.

2. Mentor Communication

- Purpose: To seek guidance, validate project direction, and ensure adherence to best practices.
- Method: Zoom call, email communication, Microsoft Teams.
- Frequency: weekly meetings, or as needed, weekly progress report.

3. Team Members Communication

- Purpose: To ensure alignment, collaboration, task tracking, and addressing any issues.
- Method: weekly team meetings, collaboration tools like Microsoft Teams, Whatsapp messaging app
- Frequency: weekly for team meetings, or as needed

Project Stakeholders

Stakeholder	Interest or Concerns
End User (Future Stakeholder)	Requiring a user-friendly interface, efficient functionality, and the ability to easily manage and assess engineering documents.
Software Developer (Future Stakeholder)	Providing necessary software or hardware components, meeting integration requirements, and maintaining long-term business relationships.
Client Organization Staff	Ensuring that the project meets their specific needs, aligns with their standards, and facilitates improved quality assurance for engineering deliverables.
Project Team	Meeting project goals, adhering to deadlines, ensuring personal growth and skill development, collaborating effectively.
Project Mentor	Guiding the team, sharing industry knowledge, ensuring the project meets industry standards, supporting team growth.

Deliverables

1. Documentation for Digitalization

Purpose: Smooth transition from manual to digital checklists

Includes: Architectural framework, process flow, user interface and more

Empowers Ingenia to implement a user-friendly app

2. Investigation Report for Automation

Purpose: Analyse automation opportunities for checklist tasks

Focus: Information block in Engineering Drawings

Guides Ingenia's informed decisions on automation

3. Agile Project Plan

Purpose: Align project execution with goals and milestones

Features: Detailed sprint-based roadmap for efficient task management

4. Technical Prototypes

Purpose: Showcase tangible outcomes of research and development

Includes: OCR technology prototypes and user-friendly Figma prototypes

5. Integration Documentation and Strategies

Purpose: Connect innovative ideas with practical implementation

Provides a clear roadmap for integrating OCR automation and digital checklists

Evaluation Criteria

1. Documentation for Digitalization

- Completeness and accuracy of requirement documents
- Effectiveness of Figma mock-up for user interface and experience

2. Investigation of Automation Opportunities

- Thoroughness of the investigation report
- Clarity in identifying suitable checklist tasks for automation

3. Agile Implementation and Progress

- Adherence to bi-weekly sprint structure
- Demonstrated progress and alignment with project goals

4. Technical Prototypes

- Functionality and accuracy of OCR technology prototypes
- Quality of Figma prototypes representing digital checklists

5. Integration Documentation and Strategies

- Clarity and effectiveness of integration strategies

Project Implementation

- Initial Research and Planning
- In-depth Research on OCR and Checklist Digitalization
- Exploring OCR and Digitalization Opportunities
- Formulating Strategies for OCR and Digitalization
- Prototyping OCR and Digitalization
- Refining Strategies and Documentation
- Presentation and Conclusion

THANK YOU!!