



Software Project Management

Register and Quality Tools

Assignment - 03

**Due
Date:**

Nov 14, 2023

By:

Zeeshan Ali 20i-2465

Ans Zeshan 20i-0543

Tayyab Qaisar 20i-0590

Course Instructor: Mam Uzma Mahar

Content

Risk Register: 2

Stake Holder Register:..... 5

Quality Tools: 7

1- Check Sheets: 8

2- Histogram: 9

3- Fishbone Diagram:..... 11

4- Flowchart:..... 12

Risk Register

Risk ID	Risk Description	Risk Category	Probability	Impact	Mitigation Strategy	Risk score	Action By	Action when
R1	Delays in Project Authorization	Project Management	Medium	High	Regularly follow up with FYP Committee for timely approval and comments.	6	Project Manager	Ongoing
R2	Changes in Stakeholder Requirements	Requirements	High	High	Implement a robust change management process. Clearly communicate the impact of changes.	9	Project Manager	Throughout the project
R3	Technical Challenges in MERN Stack	Technical	Medium	High	Conduct thorough technical feasibility studies. Allocate additional resources for technical problem-solving.	6	Development Team	Ongoing
R4	Insufficient User Adoption	Project Success	Medium	High	Implement an extensive user training and support program. Conduct user feedback sessions.	6	Project Manager, Marketing Team	After system deployment
R5	Budget Overrun	Project Management	Medium	High	Regularly monitor expenses. Prioritize features to align with the budget.	6	Project Manager	Ongoing

R6	Server Downtime	Technical	Low	High	Implement redundancy and backup systems. Regularly test server capabilities.	4	IT Manager	Ongoing
R7	Inadequate Testing	Quality Assurance	Medium	High	Implement rigorous testing protocols. Allocate additional resources for quality assurance.	6	QA Team	Before each project milestone
R8	Misalignment with Academic Standards	Project Success	Low	High	Regularly consult with the supervisor and FYP Committee. Ensure adherence to academic guidelines.	3	Supervisor, Project Manager	Ongoing
R9	Competitor Actions	External	Medium	High	Regularly monitor competitor activities. Stay agile to adapt to market changes.	6	Marketing Team	Ongoing
R10	Data Security Breach	Security	Low	High	Implement robust security measures. Regularly update security protocols.	4	Security Experts	Ongoing

Stakeholder Register

Stakeholder Name	Role	Organization	Interest/ Influence	Expectations	Key Requirements	Communication Preferences
Dr. Atif Jilani	Senior Consultant	Supervisor	High	Academic alignment, project success.	Adherence to academic standards, regular project monitoring.	Email, In-person meetings
Ans Zeshan	Developer	Team Member	Medium	Contribution to system development tasks, collaboration.	Clear task allocation, adherence to project timelines.	Trello, Gmail, In-person meetings
Zeeshan Ali	Business Analyst	Project Manager	High	Successful project completion, alignment with business objectives.	Timely project planning, resource allocation, and risk management.	Email, Video conferencing, In-person meetings
Tayyab Qaisar	Senior QA	Tester	Medium	Contribution to quality assurance, collaboration.	Clear testing protocols, adherence to project timelines.	Gmail, WhatsApp, In-person meetings
Waqar Ahmed	PR Director	Advisor	Medium	Positive project visibility, strategic advice.	Alignment with organizational PR goals, strategic input.	Email, Video conferencing, In-person meetings
Sarah Khan	UX Designer	External Consultant	Medium	High-quality user experience, project success.	Adherence to design principles, timely feedback.	Figma, Email, Video conferencing

Samina Ahmed	Marketing Specialist	Marketing Team	Medium	Positive project visibility, market competitiveness.	Alignment with marketing strategies, regular updates.	Email, social media, Weekly Meetings
John Doe	IT Manager	IT Department	Low	Smooth IT operations, minimal disruptions.	Timely information on IT-related changes, minimal downtime.	Email, IT Tickets, Weekly Updates
Emma Watson	Customer	End User	High	User-friendly platform, effective e-commerce features.	Seamless user experience, quick issue resolution.	Customer Support Portal, Email, App Notifications
Ayesha Malik	Content Creator	Marketing Team	Medium	Engaging content for marketing, project success.	Timely content creation and alignment with marketing goals.	Email, Social Media, Weekly Meetings
Ali Raza	Frontend Developer	Development Team	Medium	Smooth integration of frontend elements, project success.	Clear frontend development tasks, collaboration with design team.	Slack, Jira, In-person meetings
Sana Khan	Customer Support	Customer Support Team	High	Effective customer issue resolution, positive customer experience.	Timely response to customer queries, detailed issue tracking.	Helpdesk Software, Email, Weekly Meetings
Fahad Ahmed	Financial Analyst	Finance Department	Low	Adherence to budget, financial stability.	Regular financial reports, adherence to budget allocations.	Email, Financial Reports, Monthly Meetings

Maria Jamal	Legal Advisor	Legal Department	Low	Compliance with legal standards, risk mitigation.	Legal review of project documentation, adherence to legal guidelines.	Email, Legal Documents, Monthly Briefings
Chris Evans	User Experience Tester	QA Team	Medium	High-quality user experience, identification of usability issues.	Comprehensive UX testing protocols, collaboration with design team.	Testing Tools, Email, In-person meetings
Asad Iqbal	Server Administrator	IT Department	High	Smooth server operations, minimal downtime.	Regular server maintenance schedules, swift response to server issues.	Server Monitoring Tools, Email, IT Tickets
Farida Khan	Community Manager	Marketing Team	Medium	Positive community engagement, brand loyalty.	Community events planning, regular interaction with the community.	Social Media Platforms, Email, Community Forums
Naeem Ahmed	Procurement Manager	Procurement Department	Low	Timely acquisition of necessary resources within budget.	Clear procurement plans, adherence to budget constraints.	Email, Procurement Plans, Monthly Meetings
Zainab Ali	Human Resources Manager	HR Department	Low	Project team satisfaction, adherence to HR policies.	Team satisfaction surveys, adherence to HR guidelines.	Email, HR Surveys, Quarterly Meetings

Quality Tools:

1- Check Sheets:

Check Sheets, also known as tally sheets or frequency sheets, are simple tools used for collecting and organizing data in a systematic way. They often involve creating a table with categories and tally marks to track the occurrence of specific events or issues.

Application in FYP:

In an FYP, a Check Sheet can be used to:

- ✓ Track the number of times a certain problem or issue occurs during the project.
- ✓ Monitor the frequency of specific events or milestones.
- ✓ Document the occurrence of errors or deviations in the project process.

Example:

In FYP, we use a Check Sheet to tally the number of software maintenance factors encountered during the maintenance.

Website Creation Maintenance Checksheet						
Name of user:	Hammad Aslam			User Id:	HA-420	
Month:	June			No of website:	4	
Maintenance Factors	Frequency					
	Website 1	Website 2	Website 3	Website 4	Website 5	Total
Plugin/Extension Updates	3	2	4	5	0	14
Content Updates	8	5	6	9	0	28
Backup Routine	2	3	2	3	0	10
Analytics Review	5	4	5	5	0	19
Payment Gateway Update	6	3	8	6	0	23
Performance Monitoring	9	4	5	3	0	21
Cloud Storage Updates	4	3	4	5	0	16
Total	37	24	34	36	0	131

Figure 1: software maintenance check sheet

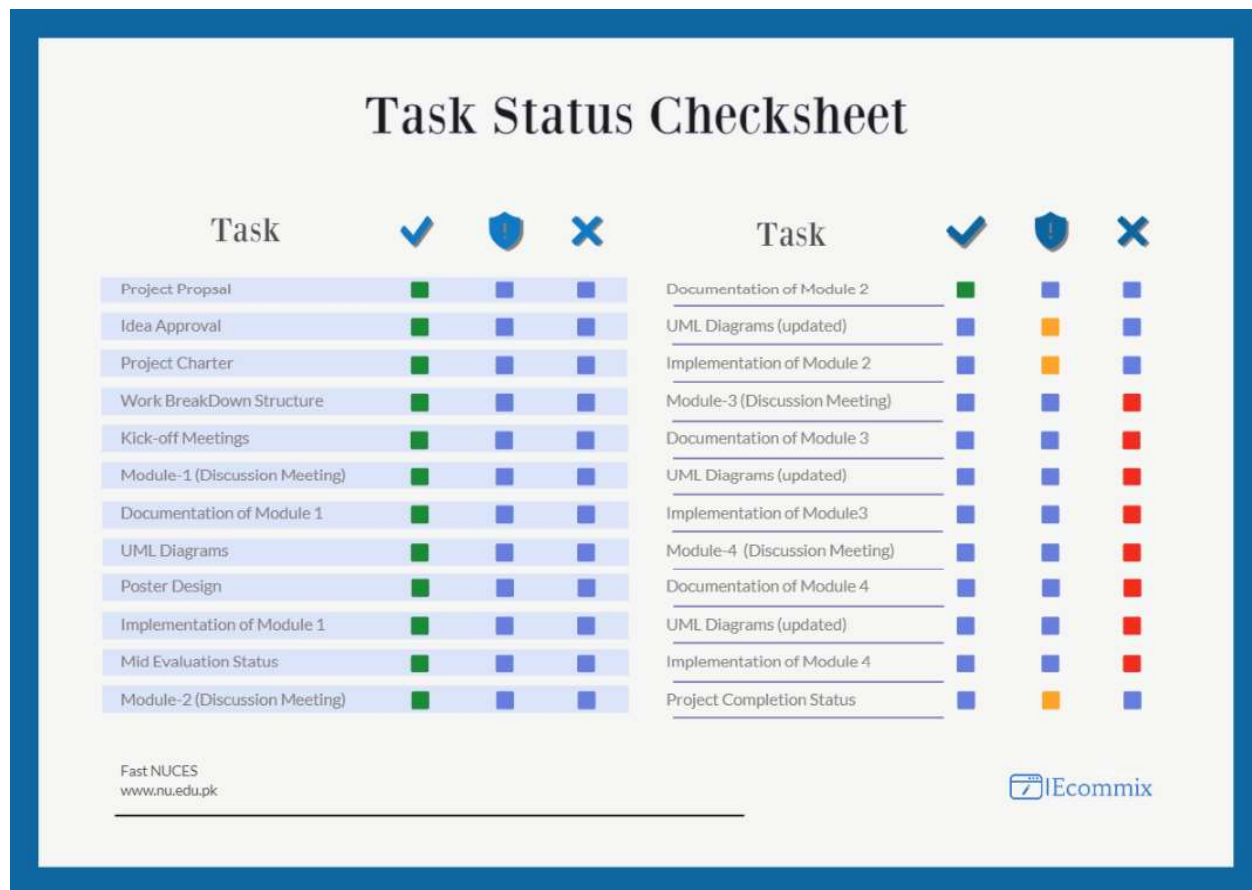


Figure 2: Task status check sheet

2- Histogram:

A Histogram is a graphical representation of the distribution of a dataset. It displays the frequency of data points within specified ranges, providing a visual overview of the data's distribution.

Application in FYP:

In an FYP, a Histogram can be used to:

- ✓ Analyze the distribution of project durations, task completion times, or resource usage.
- ✓ Identify patterns or trends in project data.
- ✓ Highlight areas where improvements or adjustments may be needed.

Example:

We created a histogram to display the occurrence of maintenance factors for different websites, helping us to identify factor that took repetition than expected.

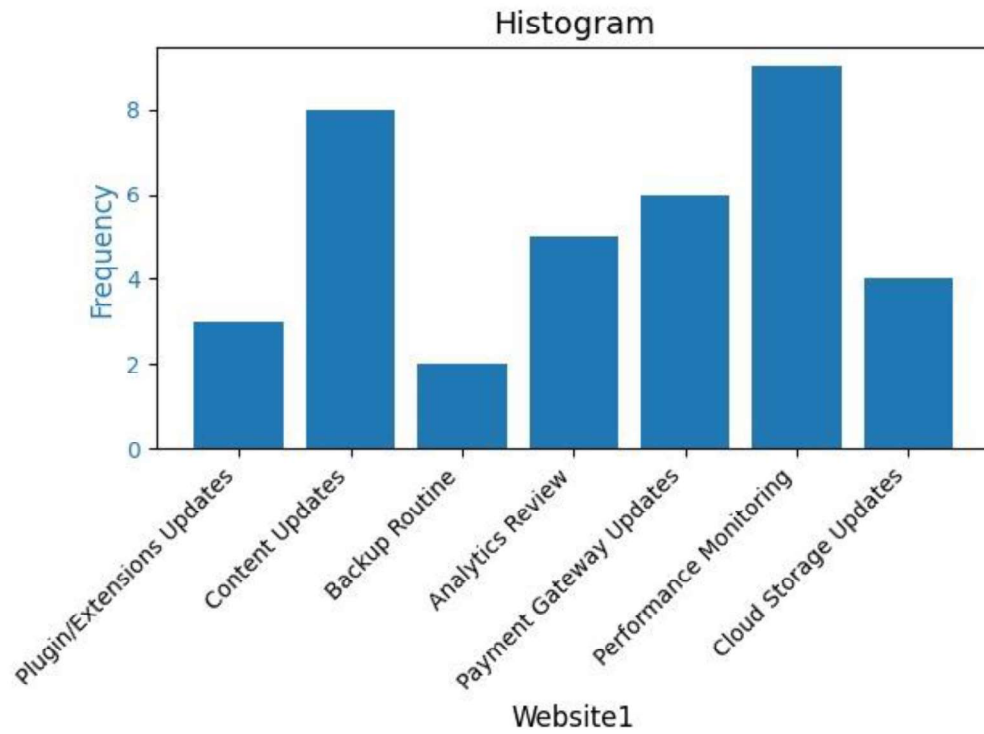


Figure 3: website histogram

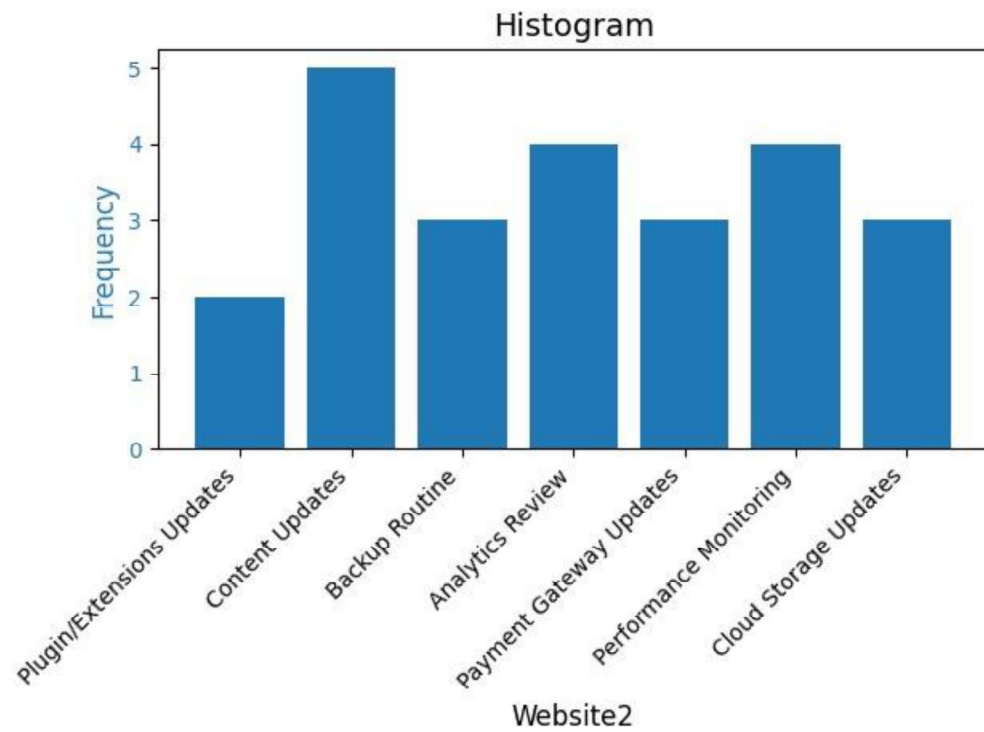


Figure 4: website histogram

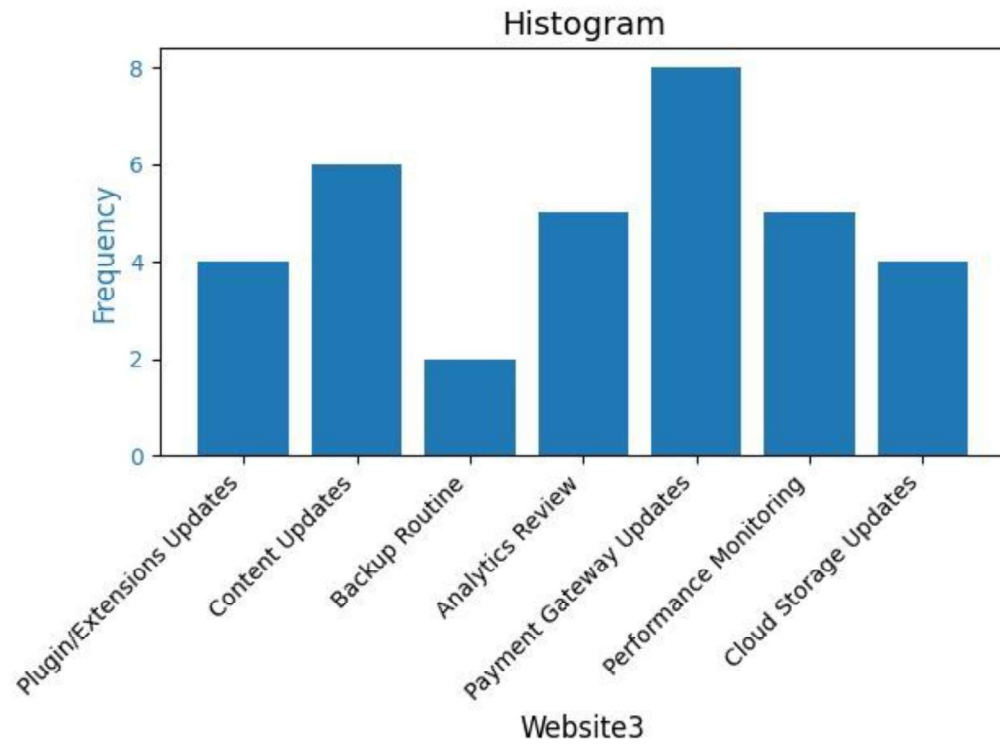


Figure 5: website histogram

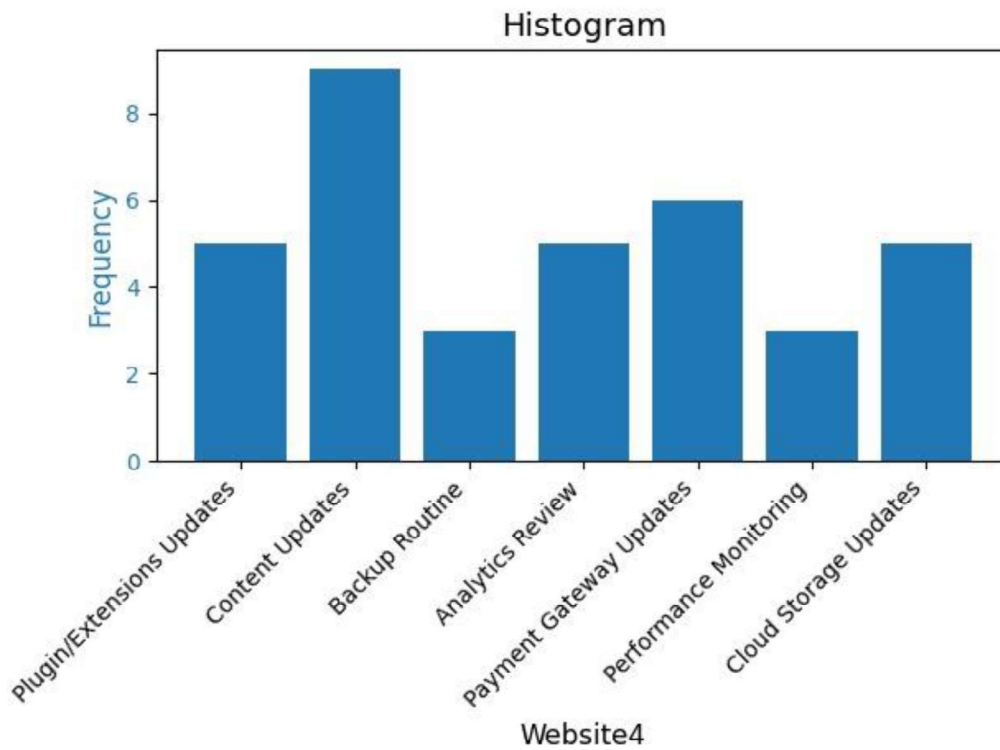


Figure 6: website histogram

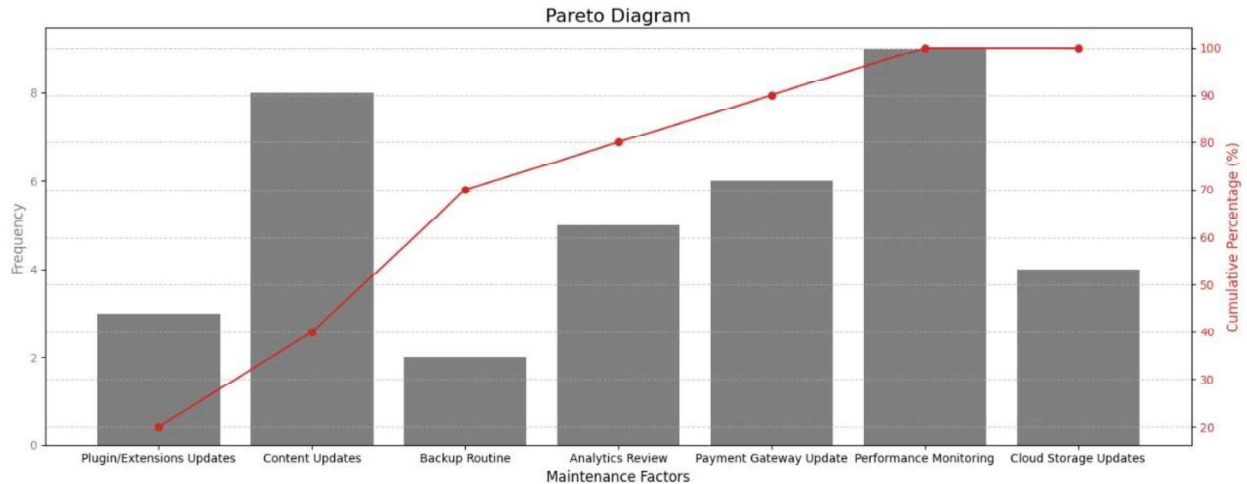


Figure 7: Pareto Diagram

3- Fishbone Diagram:

A Fishbone Diagram, also known as an Ishikawa or Cause-and-Effect Diagram, is a visual tool used to explore and categorize potential causes of a specific problem or effect.

Application in FYP:

In an FYP, a Fishbone Diagram can be used to:

- ✓ Identify and analyze the root causes of project issues.
- ✓ Explore factors contributing to delays or deviations from the project plan.
- ✓ Facilitate team discussions on problem-solving and improvement strategies.

Example:

Our project is resolving user problems. A Fishbone Diagram could help identify categories like People, Process, Technology, etc., and the specific factors within each category contributing to the problem.

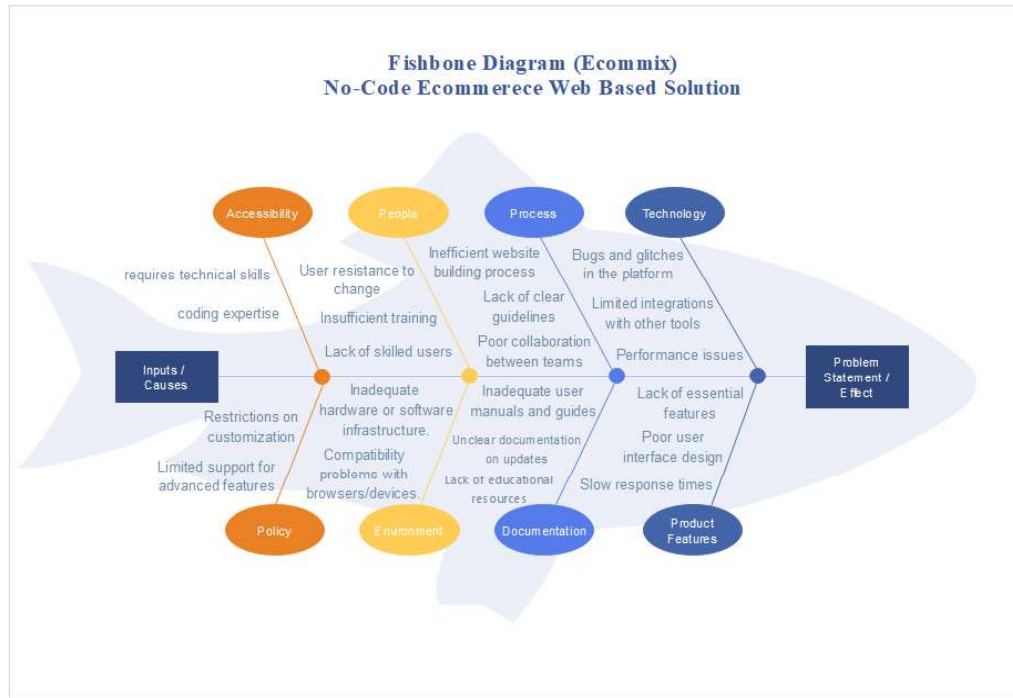


Figure 8: Fish bone Diagram of Ecommix.

4- Flowchart:

A Flowchart is a visual representation of a process, showing the steps and decision points involved. It uses different shapes to represent various types of actions or activities.

Application in FYP: In an FYP, a Flowchart can be used to:

- ✓ Illustrate the workflow of project processes or tasks.
- ✓ Identify bottlenecks or areas where the project flow can be improved.
- ✓ Communicate complex procedures or decision trees within the project.

We created a flowchart to represent the step-by-step process of data collection, analysis, and interpretation in our development project.

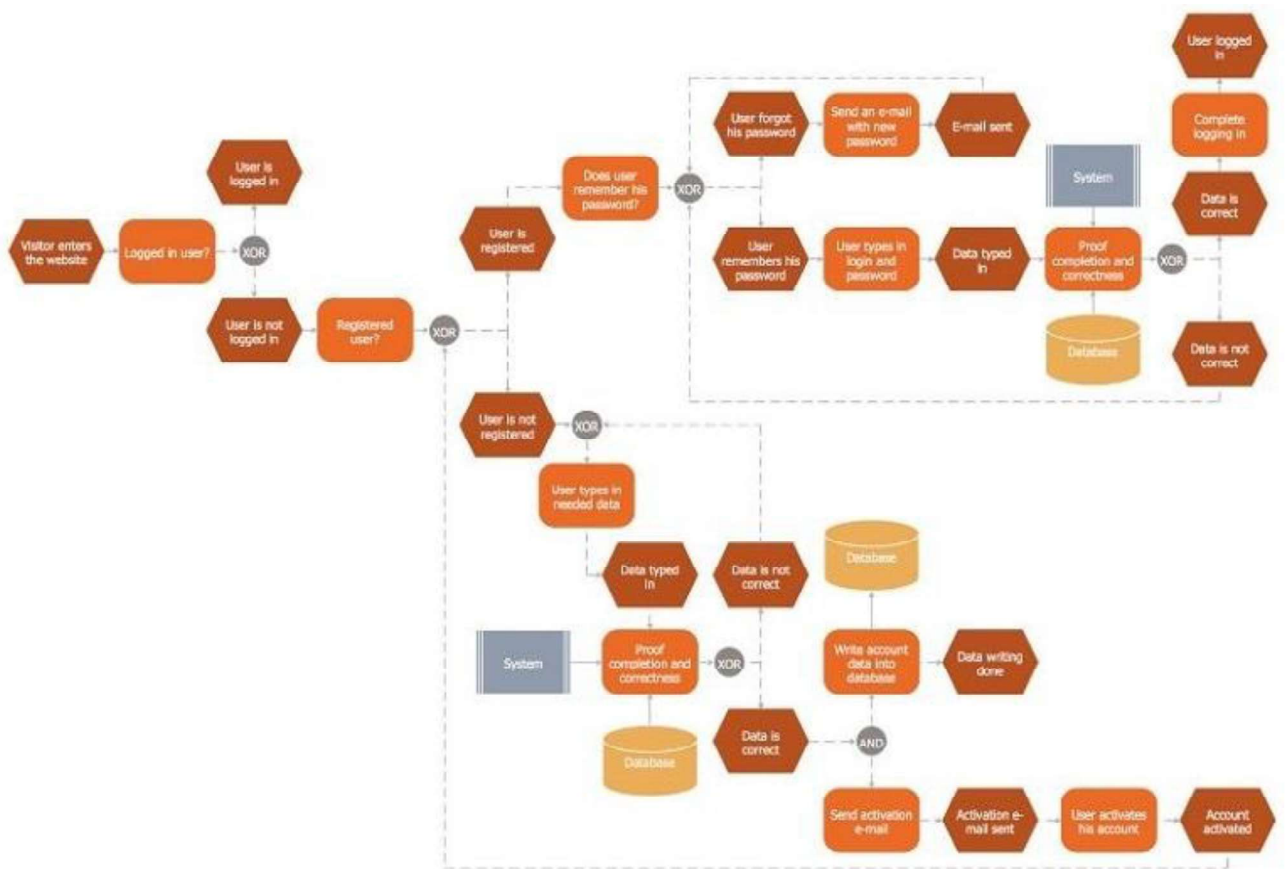


Figure 9: website login and authorization

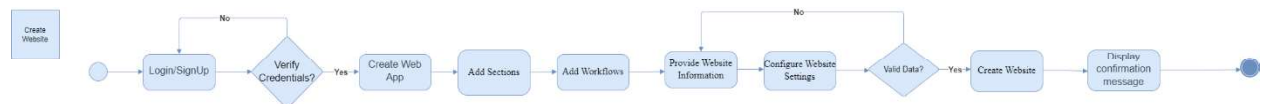


Figure 10: Create website.



Figure 11: create Wishlist.



Figure 12: Create Workflows

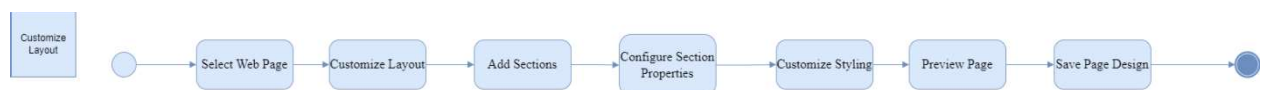
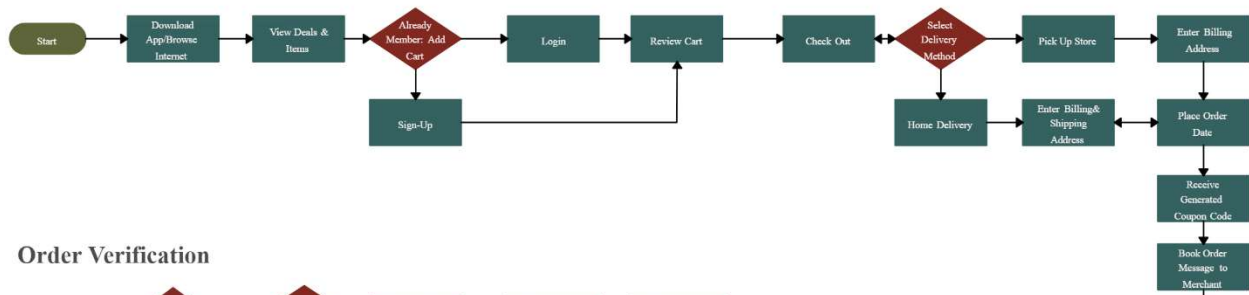
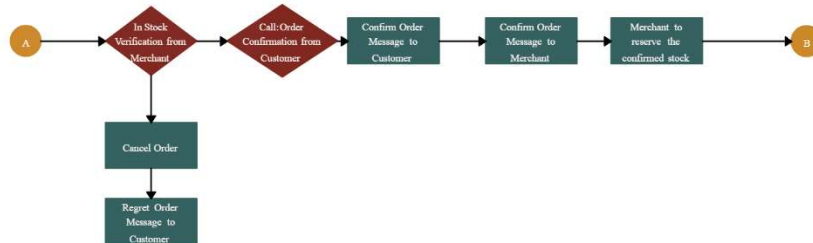


Figure 13: Customize Layout

Book Order Process



Order Verification



Order Delivery

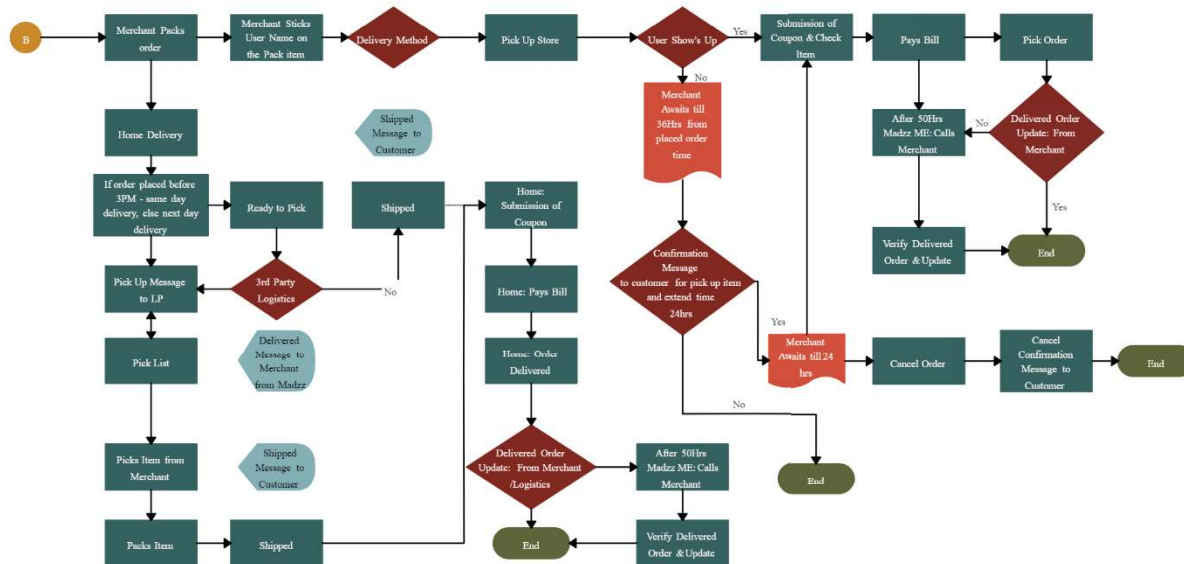


Figure 14: Process Order

These tools collectively help in managing project quality, identifying areas for improvement, and ensuring a systematic approach to problem-solving in our FYP.