

Project Phase	Project Steps	Project Activities	Estimated time
Phase 1: Project Initiation	Step 1.1: Project Goal and Objectives	Activity 1.1.1: Define project scope and objectives	1 day
		Activity 1.1.2: Prepare proposal of project	
	Step 1.2: Assemble Project Team and Assign Roles	Activity 1.2.1: Gather information on individual skills of team members	1 day
		Activity 1.2.2: Delegate roles to each member on team	
Phase 2: Requirements Gathering and Analysis	Step 2.1: Gather Initial Requirements	Activity 2.1.1: Define functional requirements and informal requirements	2 days
		Activity 2.1.2: Define process model and constraints	
	Step 2.2: Requirements Analysis and Documentation	Activity 2.1.3: Analyze requirements and complete proposal	1 day

Phase 3: Design and Planning	Step 3.1: Create System Architecture	Activity 3.1.1: Create Use Case Diagram	2 days
		Activity 3.1.2: Create Domain Model Diagram	
	Step 3.2: UI/UX Design	Activity 3.2.1: Design Login Page, and IT Personnel Pages	2 days
		Activity 3.2.2: Design IT Customer Pages	
	Step 3.3: Define Project Plan	Activity 3.3.1: Create Phases, Tasks and Activities and Estimate Time	1 day
		Activity 3.3.2: Define Milestones	
Phase 4: Development	Step 4.1: Setup Development Environment	Activity 4.1.1: Configure SQL database	2 days
	Step 4.2 Backend Development	Activity 4.2.1: Ensure SQL database is up and running	10 days
	Step 4.3 Frontend Development	Activity 4.3.1 Ensure login page is up and running	6 days

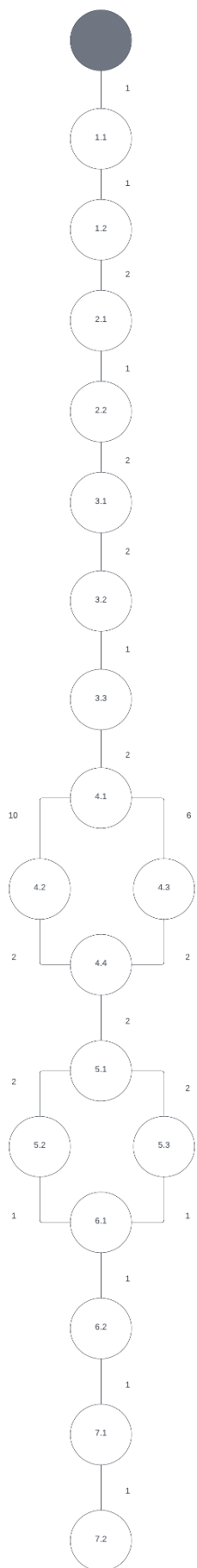
		Activity 4.3.2 Ensure ticket intake form is completed	
	Step 4.4 Integration and Testing	Activity 4.4.1 Ensure all UI components integrate together	2 days
		Activity 4.4.2 Ensure all databases integrate together	
Phase 5: Quality Assurance	Step 5.1: Test Planning	Activity 5.1.1: Analyze Produce and Create Test Strategy, Objectives and Criteria	2 day
		Activity 5.1.2: Plan Test Environment, Schedule and Estimate Time and Determine Test Deliverables	
	Step 5.2: Functional Testing	Activity 5.2.1: Analyze and Define Functional Testing Type to Use	2 days
		Activity 5.2.2: Perform Functional Testing	
	Step 5.3: Performance Testing	Activity 5.3.1: Analyze and Define Performance Testing Type to Use	2 days
		Activity 5.3.2: Perform Performance Testing	
Phase 6: Project Review and	Step 6.1: Project Review	Activity 6.1.1: Project Review Meeting	1 day

Reporting	Step 6.2: Final Report	Activity 6.2.1: Final Report Preparation	1 day
Phase 7: Final Testing and Bug Fixing	Step 7.1: Final Testing and Bug Fixing	Activity: 7.1.1: Final System Testing	1 day
	Step 7.2: Bug Fixing	Activity: 7.2.1: Bug Fixing and Fine-Tuning	1 day

Project Milestones

1.1 Project goals and objectives established
1.2 Team assembled and roles assigned
2.1 Initial requirements gathered
2.2 Requirement analysis completed
3.1 System architecture created
3.2 UI/UX design completed
3.3 Project plan defined
4.1 Development environment configured
4.2 Backend development completed
4.3 Frontend development completed
4.4 Integration and testing completed
5.1 Test planning completed
5.2 Functional testing completed
5.3 Performance testing completed
6.1 Project review meeting attended
6.2 Final report prepared
7.1 Final system tested

7.2 Bugs fixed and system fine-tuned



Note: Link for critical path is available at

https://lucid.app/lucidchart/9b03ca2e-ee09-4996-98db-3f7f4fc22091/edit?viewport_loc=-92%2C-1192%2C2964%2C1612%2C0_0&invitationId=inv_b8747cc6-516f-4470-8986-7c7973ad00d3

Activity	Earliest Start Time	Latest Start Time	Slack
1.1	1	1	0
1.2	2	2	0
2.1	3	3	0
2.2	5	5	0
3.1	6	6	0
3.2	8	8	0
3.3	10	10	0
4.1	11	11	0
4.2	13	13	0
4.3	13	17	4
4.4	23	23	0
5.1	25	25	0
5.2	27	27	0
5.3	27	27	0
6.1	29	29	0
6.2	30	30	0
7.1	31	31	0
7.2	32	32	0
	32	32	0

Critical Path

Milestones	Time to Complete (days)
1.1 through 4.1	12 days
2 possible paths:	
4.2, 4.4	12 days
4.3, 4.4	8 days
5.1	2 days
2 possible paths:	
5.2, 6.1	3 days
5.3, 6.1	3 days
6.2 through 7.2	3 days

Milestones 4.2 and 4.4 must be met before the project is finished, the schedule is constrained by the longest path. The longest path taken is 1.1 through 4.1 then 4.2, 4.4 and then 5.1, and since 5.2, 6.1 and 5.3, 6.1 have the same amount of days to complete, either path can be taken, and then 6.2 through 7.2.

Therefore the critical path takes $12 + 12 + 2 + 3 + 3 = 32$ days

Phase 1 - Gantt chart

Days

[illegible]