

Outline Number	Task Name	Duration
1	WNYLC Online Resource Center	54.75 days
1.1	Requirements Gathering & Analysis	13 days
1.1.1	Interview Customer	4 days
1.1.1.1	Acquire and define problem	1 day
1.1.1.2	Gather Requirements	1 day
1.1.1.3	Analyze requirements	1 day
1.1.1.4	Create requirements document	1 day
1.1.2	Finalize problem statement and possible solutions	7 days
1.1.2.1	Problem statement review (Second Meeting)	3 days
1.1.2.1.1	Present Problem	2 days
1.1.2.1.2	Get review	2 days
1.1.2.1.3	Brief Q&A to refine the problem statement	2 days
1.1.2.1.4	Problem statement approval	1 day
1.1.2.2	Solution Definition (High Level)	5 days
1.1.2.2.1	Determine feasibility	3 days
1.1.2.2.2	Research existing solution	2 days
1.1.2.2.3	Finalize a possible solution	2 days
1.1.3	Reuirements Gathering	3 days
1.1.3.1	Draft requirements document	2 days
1.1.3.2	Review requirements document	2 days
1.1.3.3	Revise requirements document	1 day
1.1.4	Requirements document approval	0 days
1.1.5	Initiation phase approval	0 days

1.2	Planning Phase	26.75 days
1.2.1	Project Plan Development	14.25 days
1.2.1.1	Scope definition	4 days
1.2.1.1.1	Create scope document	2 days
1.2.1.1.2	Define scope boundaries (both in and out of scope)	2 days
1.2.1.1.3	Define project deliverables	2 days
1.2.1.2	Work Breakdown Structure (WBS)	4 days
1.2.1.2.1	Create WBS to work-level execution	2 days
1.2.1.2.2	Define task dependencies	2 days
1.2.1.3	Manage development plan	2.25 days
1.2.1.3.1	Create development plan	1 day
1.2.1.3.2	Refine development plan	1 day
1.2.1.3.3	Development plan approved	1.25 days
1.2.1.4	Manage test plan	4 days
1.2.1.4.1	Create test plan	1 day
1.2.1.4.2	Refine test plan	2 days
1.2.1.4.3	Test plan approved	1 day
1.2.1.5	Manage deployment plan	4.25 days
1.2.1.5.1	Create deployment plan	2 days
1.2.1.5.2	Refine deployment plan	2 days
1.2.1.5.3	Deployment plan approved	0.25 days

1.2.1.6	Manage acceptance	2.25 days
1.2.1.6.1	Create acceptance plan	2 days
1.2.1.6.2	Acceptance plan approved	0.25 days
1.2.2	Project Milestones (PMs)	0.5 days
1.2.2.1	Define project milestones	0.5 days
1.2.3	Resource Management	2 days
1.2.3.1	Name project team members (with roles and responsibilities)	2 days
1.2.3.2	Define all project stakeholders (with roles and project team liaison)	2 days
1.2.3.3	Create org chart: project team, sponsor, steering committee, stakeholders	2 days
1.2.4	Supporting PM Process Plans	14 days
1.2.4.1	Change Management	2 days
1.2.4.1.1	Document change control procedure	2 days
1.2.4.1.2	Document change control for systems modifications	2 days
1.2.4.2	Risk Management	4 days
1.2.4.2.1	Prioritization, mitigation, and contingency guidelines	2 days
1.2.4.2.2	Document risk assessment for scope, budget, and schedule baselines	2 days
1.2.4.3	Issues Management	2 days
1.2.4.3.1	Prioritization, resolution, and tracking guidelines	2 days
1.2.4.3.2	Document issues escalation strategy	2 days
1.2.4.4	Communication Plan	4 days
1.2.4.4.1	Document project stakeholders	2 days
1.2.4.4.2	Document guidelines for document repository access and controls	2 days
1.2.4.4.3	Document standard project team and executive status report guidelines	2 days
1.2.4.5	Quality Assurance and Control Plan	2 days
1.2.4.5.1	Define user-acceptance testing plan	2 days
1.2.4.5.2	Define criteria for cost/benefit analysis	2 days
1.2.5	Create Draft Project Plan	3 days
1.2.6	Project Plan Approval	0 days
1.2.7	Planning Phase Approval	0 days

1.3	Execution Phase	38.75 days
1.3.1	Manage design	12.75 days
1.3.1.1	Develop use cases	2 days
1.3.1.2	Create hardware architecture	2 days
1.3.1.3	Create data flow	2 days
1.3.1.4	Design product	5 days
1.3.1.4.1	Website design (UI)	4.25 days
1.3.1.4.1.1	Design the standard template for website (CSS, Homepage, Menus)	1 day
1.3.1.4.1.2	Conduct a review with the team	1 day
1.3.1.4.1.3	Deliver the mockup to the client	0.25 days
1.3.1.4.1.4	Design the user registration form	2 days
1.3.1.4.1.5	Design the user profile page	2 days
1.3.1.4.1.6	Conduct a review with the team	2 days
1.3.1.4.1.7	Design the search page	1 day
1.3.1.4.1.8	Design the forum	1 day
1.3.1.4.1.9	Conduct a review with the team	1 day
1.3.1.4.2	Workflow design	0.5 days

1.3.1.4.3	Define rules and standards	0.25 days
1.3.1.4.4	Design middle tier	1 day
1.3.1.4.5	Design database	3 days
1.3.1.4.5.1	Identify the appropriate schema	2 days
1.3.1.4.5.2	Draw the rational diagram	2 days
1.3.1.4.5.3	Identify tables for each database	2 days
1.3.1.4.5.4	Conduct a review with the team	2 days
1.3.1.4.5.5	Identify the fields for each table	1 day
1.3.1.4.5.6	Identify the relationship between tables	1 day
1.3.1.4.5.7	Conduct a review with the team	1 day
1.3.1.4.6	Design access levels for users	0.25 days
1.3.1.5	Product design approved	0.25 days
1.3.1.6	Design test cases	6 days
1.3.1.6.1	UI test cases	0.5 days
1.3.1.6.2	Object test cases	1 day
1.3.1.6.3	Design workflow test cases	0.5 days
1.3.1.6.4	Rules/standards based tests	1 day
1.3.1.6.5	Middle tier tests	0.5 days
1.3.1.6.6	Database tests	1 day
1.3.1.6.7	Design security test cases	0.5 days
1.3.1.6.8	Design beta test	6 days
1.3.1.6.9	Design user acceptance test	1 day
1.3.1.7	Test cases design approved	0.25 days
1.3.1.8	Create design documentation	1 day
1.3.2	Manage Development	6.75 days
1.3.2.1	Build prototype	2 days
1.3.2.2	Demo prototype	2 days
1.3.2.3	Develop user documentation	1 day
1.3.2.4	Develop Product	4 days
1.3.2.4.1	Website development (UI)	2.5 days
1.3.2.4.1.1	Develop the user registration form	2 days
1.3.2.4.1.1.1	Code the user registration form	1 day
1.3.2.4.1.1.2	Review functionality	1 day
1.3.2.4.1.2	Develop the user profile page	2 days
1.3.2.4.1.2.1	Code the user profile page	1 day
1.3.2.4.1.2.2	Review functionality	1 day
1.3.2.4.1.3	Develop the search page	2 days
1.3.2.4.1.3.1	Code the search page	1 day
1.3.2.4.1.3.2	Review functionality	1 day
1.3.2.4.1.4	Develop the forum	2 days
1.3.2.4.1.4.1	Develop forum	1 day
1.3.2.4.1.4.2	Review functionality	1 day
1.3.2.4.1.5	Conduct a review with the team	0.5 days
1.3.2.4.2	Database development	4 days
1.3.2.4.2.1	Database development (Userbase)	3 days
1.3.2.4.2.1.1	Identify the stored procedures for User Registration form	1 day
1.3.2.4.2.1.2	Code the stored procedures	2 days

1.3.2.4.2.1.3	Review functionality	2 days
1.3.2.4.2.2	Database development (User profile)	3 days
1.3.2.4.2.2.1	Identify the stored procedures for User Profile page	1 day
1.3.2.4.2.2.2	Code the stored procedures	2 days
1.3.2.4.2.2.3	Review functionality	2 days
1.3.2.4.2.3	Database development (Search page)	3 days
1.3.2.4.2.3.1	Identify the stored procedures for Search Page	1 day
1.3.2.4.2.3.2	Code the stored procedures	2 days
1.3.2.4.2.3.3	Create tables and stored procedures for autocomplete feature	2 days
1.3.2.4.2.3.4	Review functionality	2 days
1.3.2.4.2.4	Database development (Forum)	3 days
1.3.2.4.2.4.1	Identify the stored procedures for Forum	1 day
1.3.2.4.2.4.2	Code the stored procedures	2 days
1.3.2.4.2.4.3	Review functionality	2 days
1.3.2.4.2.5	Perform Normalization	1 day
1.3.3	Testing	14 days
1.3.3.1	Unit Test	3 days
1.3.3.1.1	Write unit test cases for each module	1 day
1.3.3.1.2	Merge unit tests from each team member and review	1 day
1.3.3.1.3	Introduce JUnit to each code module	1 day
1.3.3.1.4	Execute the code modules	1 day
1.3.3.1.5	Verify JUnit test results	1 day
1.3.3.1.6	Update test plan with test results	1 day
1.3.3.2	Integration Test	3 days
1.3.3.2.1	After integration, identify test case for overall system	1 day
1.3.3.2.2	Perform Black Box testing	1 day
1.3.3.2.3	Perform White box testing	1 day
1.3.3.2.3.1	Path testing	1 day
1.3.3.2.4	Update test plan with test results	1 day
1.3.3.3	Smoke Testing	3 days
1.3.3.3.1	Increase stress in system	3 days
1.3.3.3.2	Test for memory failures and data leak	3 days
1.3.3.3.3	Build smoke test report	3 days
1.3.3.4	Repeat iterations of testing until defect rate is brought to minimum	2 days
1.3.3.5	Compile results	2 days
1.3.3.6	Generate report	1 day
1.3.3.7	Present report	1 day
1.3.4	Deployment	24 days
1.3.4.1	Identify hardware requirements	4 days
1.3.4.1.1	Report hardware/environment for every single module	2 days
1.3.4.1.2	Identify common hardware across two or more modules	2 days
1.3.4.1.3	Group hardware according to functionality	2 days
1.3.4.1.4	Procure hardware if necessary	2 days
1.3.4.2	Setup Data-Centers	3 days
1.3.4.2.1	Identify distributed data center services	3 days
1.3.4.2.2	Set up distributed data centers for MapReduce operations	3 days
1.3.4.3	Setup Distributed System	6 days

1.3.4.3.1	Build/Purchase Hadoop Distributed File System	4 days
1.3.4.3.2	Setup MapReduce on every node of the distributed system	4 days
1.3.4.3.3	Test MapReduce for speed of operation	2 days
1.3.4.3.4	Review results with the customer	2 days
1.3.4.4	Configure	2 days
1.3.4.4.1	Install the Information Retrieval (Parser) system on HDFS	2 days
1.3.4.4.2	Configure connectivity from the HDFS to client location	2 days
1.3.4.5	Installation at client-location	3 days
1.3.4.5.1	Install Git Source Control Management tool	3 days
1.3.4.5.2	Update the existing code at client system with modules developed	3 days
1.3.4.5.3	Configure database servers	3 days
1.3.4.6	Knowledge transfer	6 days
1.3.4.6.1	Educate internal customers (lawyers) about the working of the system	2 days
1.3.4.6.1.1	Forum rules	2 days
1.3.4.6.1.2	Searching techniques	2 days
1.3.4.6.2	Demonstrate features of the system	2 days
1.3.4.6.3	Educate Admin users about editing configurations	2 days
1.3.4.6.3.1	Providing access permissions to forum users	2 days
1.3.4.6.3.2	Delete/Edit posts made by any user	2 days
1.3.4.6.4	Basic troubleshooting skills	2 days
1.3.4.6.5	Provide user-manual for external customers (common users outside	2 days
1.3.5	Execution Phase Approval	0 days