**Phase 1: Initiation (2 weeks)**

Artifact 1: Project Plan

Define project scope, objectives, and deliverables.

Identify key stakeholders and their roles.

Create a communication plan.

**Phase 2: Requirements Gathering and Analysis (2 weeks)**

Collect and analyze client requirements.

Define functional and non-functional requirements.

Create a requirements document.

Phase 3: Design (4 weeks)

**Artifact 2: UX/UI Design**

Develop wireframes and prototypes.

Design user interfaces.

Validate designs with stakeholders.

**Phase 4: Development (18 weeks)**

Artifact 3: Front-end Development (8 weeks)

Implement user interfaces.

Integrate design elements.

Develop client-side functionality.

Artifact 4: Back-end Development (10 weeks)

Design and set up the server infrastructure.

Implement server-side logic and databases.

Integrate front-end and back-end components.

**Phase 5: Testing (10 weeks)**

Artifact 5: Integration Testing (4 weeks)

Test the system's integration and data flow.

Identify and resolve integration issues.

Artifact 6: User Acceptance Testing (4 weeks)

**Involve stakeholders in testing.**

Collect feedback and make necessary adjustments.

Artifact 7: Security Testing (2 weeks)

Perform security assessments and penetration testing.

Address security vulnerabilities.

**Phase 6: Deployment (2 weeks)**

Plan and execute the deployment process.

Monitor system performance and stability after deployment.

**Phase 7: Post-Deployment (4 weeks)**

Artifact 8: Bug Fixing and Maintenance

Address any post-launch issues.

Apply necessary updates and improvements.

**Resource Plan: New Web App Development Project**

**Project Manager**

Dedication: 100% of their time

***Responsibilities:***

* Overall project management.
* Stakeholder communication and coordination.
* Project planning and monitoring.
* Issue resolution and risk management.

**Business Analyst**

Dedication: 50% of their time

***Responsibilities:***

* Gather and analyze project requirements.
* Develop and maintain project documentation.
* Liaison between stakeholders and the development team.
* Assist in project scope and change management.

**UX/UI Designer**

Dedication: 100% of their time

***Responsibilities:***

* Design user interfaces, wireframes, and prototypes.
* Collaborate with the team and stakeholders to ensure design alignment with project goals.
* Continuously refine and enhance the user experience.

**Front-end Developer**

Dedication: 100% of their time

***Responsibilities:***

* Implement user interfaces.
* Integrate design elements.
* Develop client-side functionality.
* Collaborate with the back-end developer for seamless integration.

**Back-end Developer**

Dedication: 100% of their time

***Responsibilities:***

* Design and set up the server infrastructure.
* Implement server-side logic and databases.
* Collaborate with the front-end developer for smooth integration.

**Quality Assurance Engineer**

Dedication: 50% of their time

***Responsibilities:***

* Create test plans and test cases.
* Execute testing and identify defects.
* Collaborate with the development team to ensure software quality.
* Contribute to user acceptance testing.

**DevOps Engineer**

Dedication: 50% of their time

***Responsibilities:***

* Set up and maintain development and production environments.
* Automate deployment processes.
* Monitor system performance and address infrastructure-related issues.
* Collaborate with the development team to ensure a smooth deployment.