

# Example Scrum Sprint Plan

## Web Application Development & Deployment on AWS

**Project Duration:** 12 Weeks  
**Sprint Length:** 2 Weeks  
**Methodology:** Scrum Agile  
**Cloud Platform:** Amazon Web Services

## Project Overview

**Goal:** Develop, test, secure, and deploy a scalable web application on AWS using Agile Scrum methodology.

### Team Structure

Role	Responsibility
Product Owner	Defines requirements & priorities
Scrum Master	Facilitates Agile process
Frontend Developers	UI/UX implementation
Backend Developers	APIs & business logic
DevOps Engineer	AWS infrastructure & CI/CD
QA Engineer	Testing & quality assurance
Security Engineer	Security validation

## Sprint Plan Overview

Sprint	Duration	Major Goal
Sprint 0	Week 1	Planning & Architecture
Sprint 1	Week 2-3	Infrastructure Setup
Sprint 2	Week 4-5	Authentication & Core Backend
Sprint 3	Week 6-7	Frontend Development
Sprint 4	Week 8-9	Integration & Testing
Sprint 5	Week 10-11	Security, Performance & Monitoring
Sprint 6	Week 12	Production Deployment & Release

# Sprint 0 — Project Initiation & Architecture

## Objectives

- Gather requirements
- Define AWS architecture
- Create backlog
- Establish DevOps standards

## User Stories

- As a product owner, I want project requirements documented
- As a DevOps engineer, I want AWS architecture designed
- As a developer, I want Git repositories configured

## Tasks

- Requirements workshop
- Architecture diagram creation
- Sprint backlog preparation
- Git branching strategy
- Risk assessment

## Deliverables

- Product backlog
  - High-level architecture
  - Sprint roadmap
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# Sprint 1 — AWS Infrastructure Setup

## Objectives

Build foundational cloud infrastructure.

## AWS Services

- VPC
- EC2
- RDS
- S3
- IAM
- CloudWatch

## User Stories

- As a developer, I want development infrastructure available
- As a security engineer, I want IAM roles configured securely

## Tasks

- Create VPC & subnets
- Configure security groups
- Provision EC2 instances
- Configure RDS database
- Setup S3 bucket
- Enable monitoring

## Deliverables

- Development environment
- Infrastructure as Code templates
- Cloud monitoring baseline

# Sprint 2 — Authentication & Backend APIs

## Objectives

Develop backend services and authentication.

## AWS Services

- API Gateway
- Lambda / EC2 backend
- Cognito
- Secrets Manager

## User Stories

- As a user, I want secure login functionality
- As an admin, I want role-based access control

## Tasks

- User authentication module
- JWT token implementation
- REST API development
- Database schema creation

- API testing

## **Deliverables**

- Working APIs
- Authentication system
- Backend integration

# **Sprint 3 — Frontend Development**

## **Objectives**

Develop responsive web UI.

## **Technologies**

- React / Angular / Vue
- CloudFront
- S3 Static Hosting

## **User Stories**

- As a user, I want responsive UI access
- As a user, I want dashboard visibility

## **Tasks**

- Login page
- Dashboard UI
- API integration
- Responsive design
- Form validation

## **Deliverables**

- Functional frontend
- API-connected UI
- UI test reports

# Sprint 4 — Integration & QA Testing

## Objectives

Perform integration and system testing.

## AWS Services

- CodeBuild
- CodePipeline
- CloudWatch Logs

## User Stories

- As QA, I want automated test execution
- As DevOps, I want CI/CD automation

## Tasks

- End-to-end testing
- Integration testing
- CI/CD pipeline creation
- Regression testing
- Bug fixing

## Deliverables

- Automated pipeline
- Test execution reports
- Stable QA environment

# Sprint 5 — Security, Monitoring & Optimization

## Objectives

Improve reliability, security, and scalability.

## AWS Services

- WAF
- Shield
- Auto Scaling
- CloudTrail

- CloudFront

## User Stories

- As a security engineer, I want threat protection enabled
- As an operations engineer, I want centralized logging

## Tasks

- WAF configuration
- SSL/TLS implementation
- Auto scaling setup
- Load testing
- Logging & alerting

## Deliverables

- Security hardening
- Performance reports
- Monitoring dashboards

# Sprint 6 — Production Deployment & Release

## Objectives

Deploy production-ready application.

## AWS Services

- Route 53
- Elastic Load Balancer
- ECS/EKS (Optional)
- Backup & DR services

## User Stories

- As a customer, I want reliable production access
- As an operations team, I want rollback capability

## Tasks

- Production deployment
- DNS configuration
- Backup validation
- Disaster recovery testing
- Release documentation

- Go-live support

## **Deliverables**

- Production release
- Deployment documentation
- Operational handover

## **Scrum Ceremonies**

<b>Ceremony</b>	<b>Frequency</b>	<b>Purpose</b>
Sprint Planning	Start of Sprint	Define sprint scope
Daily Standup	Daily	Team synchronization
Backlog Refinement	Weekly	Prioritize backlog
Sprint Review	End of Sprint	Demo completed work
Sprint Retrospective	End of Sprint	Process improvement