

## AMAZON Payment System

The **Amazon Payment System** is a critical module designed to handle secure, scalable, and seamless payment processing within the Amazon e-commerce ecosystem. This system supports a wide range of payment options including UPI, credit/debit cards, net banking, Amazon Pay wallet, and EMI plans. It also incorporates secure authorization, refund mechanisms, fraud prevention, and wallet management.

To build this system efficiently, I followed a structured Agile hierarchy: **Epic → Features → User Stories → Tasks**, ensuring each business requirement was broken down into manageable, trackable components.

### Created a Project named “Amazon Payment”:

This screenshot shows the Azure DevOps Project Overview page for the 'Amazon Payment' project. The left sidebar includes links for Overview, Summary, Dashboards, Wiki, Boards, Repos, Pipelines, Test Plans, and Artifacts. The main content area features a welcome illustration of a person working at a desk with a dog. Below it, a section titled 'Welcome to the project!' asks 'What service would you like to start with?' and lists 'Boards', 'Repos', 'Pipelines', and 'Test Plans'. To the right, a 'Project stats' card displays a placeholder message: 'No stats are available at this moment. Setup a service to see project activity.' The top navigation bar shows the project name 'simantinip04 / Amazon Payment / Overview / Summary' and includes a search bar and various project settings icons.

### Created an Epic named “Payment”:

This screenshot shows the Azure DevOps Work Items page for the 'Payment' epic under the 'Amazon Payment' project. The left sidebar includes links for Work items, Boards, Backlogs, Sprints, Queries, Delivery Plans, and Analytics views. The main content area shows a single work item for the 'Payment' epic, created by 'Simantini Patil'. The work item details include: State: New; Reason: New; Area: Amazon Payment; Iteration: Amazon Payment. The 'Description' section states: 'The Amazon Payment System project focuses on designing and implementing a secure, reliable, and scalable digital payment infrastructure to support seamless transactions within the Amazon ecosystem. This system will allow customers to pay for products and services using various payment methods including credit/debit cards, UPI, net banking, Amazon Pay balance, and EMI options.' The 'Planning' section shows Priority: 1, Risk: 1 - High, Effort: 1, and Business Value: 1. The 'Deployment' section provides instructions on tracking releases. The 'Development' section includes a note to link an Azure Repos commit or branch. The bottom of the page lists 'Objectives' with two bullet points: 'Develop a unified payment gateway for Amazon users.' and 'Support multiple secure payment options.'

### Created a Feature named “Payment Gateway Integration”:

The screenshot shows the Azure DevOps interface for creating a work item. The project is 'Amazon Payment'. A new feature named 'Payment Gateway Integration' is being created by 'Simantini Patil'. The 'Description' section states: 'This feature involves integrating third-party and proprietary payment gateways into the Amazon platform to handle transaction processing. The system should support secure API communication, real-time callbacks, and robust error handling to ensure high transaction success rates and minimal latency.' The 'Outcome' is described as 'A seamless backend infrastructure for initiating, processing, and confirming payments via multiple gateways.' The 'Planning' section shows priority 1, risk 1, and effort 1. The 'Deployment' section provides instructions on tracking releases. The 'Development' section includes an 'Add link' button.

### Created an User Story named “Integrate Multiple Payment Gateways with Backend”:

The screenshot shows the Azure DevOps interface for creating a work item. The project is 'Amazon Payment'. A new user story named 'Integrate Multiple Payment Gateways with Backend' is being created by 'Simantini Patil'. The 'Description' section states: 'Integrate Amazon's backend system with multiple third-party payment gateways (e.g., Razorpay, PayU, Stripe) to enable transaction processing through various providers.' The 'Acceptance Criteria' section lists several bullet points: 'Payment requests can be routed to different gateways.', 'Gateway credentials and endpoints are configured securely.', 'The system returns success/failure based on the gateway response.', and 'Gateway timeout and retry logic is implemented.' The 'Planning' section shows story points 3, priority 1, and risk 1. The 'Classification' section indicates the value area is 'Business'. The 'Development' section includes an 'Add link' button.

### Created a Task:

The screenshot shows the Azure DevOps interface for creating a work item. The project is 'Amazon Payment'. A task named 'Create DB Layer' is being created by 'Simantini Patil'. The 'Description' section says 'Click to add Description.' The 'Discussion' section has a comment placeholder: 'Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.' The 'Planning' section shows priority 2 and activity 2. The 'Effort (Hours)' section shows original estimate, remaining, and completed fields. The 'Implementation' section indicates the task is 'Integrated in Build'. The 'Development' section includes an 'Add link' button.

- Epic: Amazon Payment System
  - └ Feature 1: Payment Gateway Integration
    - | └ User Story 1: Integrate Multiple Payment Gateways with Backend
      - | | └ Task: Create API Layer for Gateway Integration
      - | | └ Task: Create DB Layer for Storing Gateway Credentials and Responses
      - | └ Task: Create Monitoring Logic for Gateway Failures
    - | └ User Story 2: Log and Monitor Gateway Transaction Responses
      - | └ Task: Create API Layer to Capture and Format Gateway Logs
      - | └ Task: Create DB Layer to Store Gateway Logs
      - | └ Task: Create UI Layer to View and Filter Logs
  - └ Feature 2: Multiple Payment Methods Support
    - | └ User Story 3: Enable UPI, Card, and Net Banking Payment Options
      - | | └ Task: Create UI Layer for Payment Method Selection
      - | | └ Task: Create API Layer to Handle Payment Initiation
      - | └ Task: Create DB Layer for Payment Method Metadata
    - | └ User Story 4: Implement Saved Payment Method Functionality
      - | └ Task: Create UI Layer for Managing Saved Methods
      - | └ Task: Create API Layer for Saving/Finding Methods
      - | └ Task: Create DB Layer for Secure Storage (Tokenized)
  - └ Feature 3: Payment Authorization and Verification
    - | └ User Story 5: OTP Verification for High-Value Transactions
      - | | └ Task: Create UI Layer for OTP Entry
      - | | └ Task: Create API Layer for OTP Generation & Verification
      - | └ Task: Create DB Layer for OTP Tracking
    - | └ User Story 6: Implement 3D Secure for Card Payments
      - | └ Task: Create UI Layer for 3DS Redirection
      - | └ Task: Create API Layer for 3DS Flow Handling
      - | └ Task: Create DB Layer for 3DS Logs

- └──  Feature 4: Refund and Cancellation Handling
  - | └──  User Story 7: Enable Refund to Original Payment Method on Cancellation
    - | | └──  Task: Create API Layer for Refund Trigger
    - | | └──  Task: Create DB Layer for Refund Records
    - | | └──  Task: Create UI Layer to Show Refund Status
  - | └──  User Story 8: Track and Display Real-Time Refund Status
    - | | └──  Task: Create UI Layer for Refund Timeline
    - | | └──  Task: Create API Layer for Status Polling
    - | | └──  Task: Create DB Layer for Status Updates
- └──  Feature 5: Amazon Pay Wallet Management
  - | └──  User Story 9: Display Wallet Balance and Transaction History
    - | | └──  Task: Create UI Layer for Wallet Dashboard
    - | | └──  Task: Create API Layer for Wallet Balance & History
    - | | └──  Task: Create DB Layer for Wallet Transactions
  - | └──  User Story 10: Implement Auto-Reload Feature for Wallet
    - | | └──  Task: Create UI Layer for Auto-Reload Settings
    - | | └──  Task: Create API Layer for Auto-Reload Trigger
    - | | └──  Task: Create DB Layer for Auto-Reload Configuration

## EPIC—

40

 Payment Simantini Patil

● New

Amazon Payment

## Features—

	45	 Amazon Pay Wallet Management	...	 SP Simantini Patil	● New	Amazon Payment
	44	 Refund and Cancellation Handling		 SP Simantini Patil	● New	Amazon Payment
	43	 Payment Authorization and Verification		 SP Simantini Patil	● New	Amazon Payment
	42	 Multiple Payment Methods Support		 SP Simantini Patil	● New	Amazon Payment
	41	 Payment Gateway Integration		 SP Simantini Patil	● New	Amazon Payment

## User Story—

55	Implement Auto-Reload Feature for Wallet	Simantini Patil	● New	Amazon Payment
54	Display Wallet Balance and Transaction History	Simantini Patil	● New	Amazon Payment
53	Track and Display Real-Time Refund Status	Simantini Patil	● New	Amazon Payment
52	Enable Refund to Original Payment Method on Cancellation	Simantini Patil	● New	Amazon Payment
51	Implement 3D Secure for Card Payments	Simantini Patil	● New	Amazon Payment
50	OTP Verification for High-Value Transactions	Simantini Patil	● New	Amazon Payment
49	Implement Saved Payment Method Functionality	Simantini Patil	● New	Amazon Payment
48	Enable UPI, Card, and Net Banking Payment Options	Simantini Patil	● New	Amazon Payment
47	Log and Monitor Gateway Transaction Responses	Simantini Patil	● New	Amazon Payment
46	Integrate Multiple Payment Gateways with Backend	Simantini Patil	● New	Amazon Payment

**Tasks—**

66	<input checked="" type="checkbox"/> Create DB Layer	Simantini Patil	● New	Amazon Payment
65	<input checked="" type="checkbox"/> Create UI Layer	Simantini Patil	● New	Amazon Payment
64	<input checked="" type="checkbox"/> Create API Layer	Simantini Patil	● New	Amazon Payment
63	<input checked="" type="checkbox"/> Create DB Layer	Simantini Patil	● New	Amazon Payment
62	<input checked="" type="checkbox"/> Create UI Layer	Simantini Patil	● New	Amazon Payment
61	<input checked="" type="checkbox"/> Create API Layer	Simantini Patil	● New	Amazon Payment
60	<input checked="" type="checkbox"/> Create DB Layer	Simantini Patil	● New	Amazon Payment
59	<input checked="" type="checkbox"/> Create UI Layer	Simantini Patil	● New	Amazon Payment
58	<input checked="" type="checkbox"/> Create API Layer	Simantini Patil	● New	Amazon Payment
57	<input checked="" type="checkbox"/> Create DB Layer	Simantini Patil	● New	Amazon Payment
56	<input checked="" type="checkbox"/> Create UI Layer	Simantini Patil	● New	Amazon Payment
78	<input checked="" type="checkbox"/> Create DB Layer	Simantini Patil	● New	Amazon Payment
77	<input checked="" type="checkbox"/> Create UI Layer	Simantini Patil	● New	Amazon Payment
76	<input checked="" type="checkbox"/> Create API Layer	Simantini Patil	● New	Amazon Payment
75	<input checked="" type="checkbox"/> Create DB Layer	Simantini Patil	● New	Amazon Payment
74	<input checked="" type="checkbox"/> Create UI Layer	Simantini Patil	● New	Amazon Payment
73	<input checked="" type="checkbox"/> Create API Layer	Simantini Patil	● New	Amazon Payment
72	<input checked="" type="checkbox"/> Create DB Layer	Simantini Patil	● New	Amazon Payment
71	<input checked="" type="checkbox"/> Create UI Layer	Simantini Patil	● New	Amazon Payment
70	<input checked="" type="checkbox"/> Create API Layer	Simantini Patil	● New	Amazon Payment
69	<input checked="" type="checkbox"/> Create DB Layer	Simantini Patil	● New	Amazon Payment
68	<input checked="" type="checkbox"/> Create UI Layer	Simantini Patil	● New	Amazon Payment
67	<input checked="" type="checkbox"/> Create API Layer	Simantini Patil	● New	Amazon Payment
85	<input checked="" type="checkbox"/> Create API Layer	Simantini Patil	● New	Amazon Payment
84	<input checked="" type="checkbox"/> Create DB Layer	Simantini Patil	● New	Amazon Payment
83	<input checked="" type="checkbox"/> Create UI Layer	Simantini Patil	● New	Amazon Payment
82	<input checked="" type="checkbox"/> Create API Layer	Simantini Patil	● New	Amazon Payment
81	<input checked="" type="checkbox"/> Create DB Layer	Simantini Patil	● New	Amazon Payment
80	<input checked="" type="checkbox"/> Create UI Layer	Simantini Patil	● New	Amazon Payment
79	<input checked="" type="checkbox"/> Create API Layer	Simantini Patil	● New	Amazon Payment
78	<input checked="" type="checkbox"/> Create DB Layer	Simantini Patil	● New	Amazon Payment