Document 1: Definition of Done

For the LMS (Testbook) enhancement project, it will serve as a foundation for evaluating when a feature or iteration is ready to be deployed.

Project Name: Testbook LMS Enhancement Project

Author: Sarah Williams, BA

Date: 14-01-2025

DoD Checklist for LMS Enhancement Project

Acceptance Criteria:

* Fully satisfy all **acceptance criteria** defined for the user story.
* Align with customer requirements and assumptions.
* Receive approval from the **Product Owner (PO)** for functionality and completeness

Quality Criteria:

* Implemented as **error-free, functional code** that satisfies the defined functionality.
* Pass **unit testing** with all tests written and successfully executed.
* Integrate seamlessly into the project, building successfully in the test environment.
* Undergo and pass **functional and non-functional testing**, including:
  1. Cross-browser and cross-device compatibility tests.
  2. Load and performance tests, ensuring the system meets scalability requirements.
* Reviewed and approved through **peer code reviews**.
* Complete any **planned refactoring** to ensure maintainable code.

Deployment Readiness:

* Deployed to a test environment identical to production for verification.
* Pass all regression testing to ensure no adverse effects on existing functionalities.
* Include updated technical documentation (e.g., system configuration, user guides, and FAQs).
* Align with a documented and approved deployment plan for the production environment.

Documentation And Approvals:

* Accompanied by updated and accurate training materials for stakeholders and end-users.
* Receive approval from key stakeholders, including the UX designer and Product Owner (PO).

|  |  |
| --- | --- |
| Role | Responsibilities |
| Business Analyst (BA) | Define and validate acceptance and quality criteria; ensure documentation updates. |
| Product Owner (PO) | Validate and approve functionality as aligned with business objectives. |
| Developers | Write quality code, implement functionality, and perform peer reviews. |
| QA Team | Conduct functional, non-functional, and regression testing. |
| UX Designer | Approve user experience and design aspects. |
| Scrum Master | Ensure compliance with the DoD during Agile ceremonies and delivery. |

Approvals:

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Name | Date | Signature |
| Business Analyst (BA) | Ms Sarah | 14-01-2025 |  |
| Product Owner (PO) | Mr Joy | 14-01-2025 |  |
| Scrum Master | Mr. Zeke | 14-01-2025 |  |

This Definition of Done document serves as a comprehensive checklist and guideline for the Testbook LMS Enhancement Project. It ensures that all deliverables meet customer and stakeholder requirements, adhere to quality standards, and are production-ready.

Document 2 Product Vision

|  |  |  |  |
| --- | --- | --- | --- |
| Scrum Project Name: | Testbook LMS Enhancement |  |  |
| Venue: | Conference Room 2, HQ |  |  |
| Date: 14-01-2025 | Start Time: 10:00Am | End Time: 12:00 PM | Duration: 2Hours |
| Client: | Testbook Ltd. |  |  |
| Stakeholder Lists: | Ms. Emily | Mr. George | Ms. Olive |
|  |  |  |  |

|  |  |
| --- | --- |
| Scrum Team | |
| Product owner: | Mr. Joy |
| Scrum Master: | Mr. Zeke |
| Scrum Developer 1: | Liam Wilson |
| Scrum Developer 2: | Ava Martinez |
| Scrum Developer 3: | Noah Brown |
| Scrum Developer 4: | Sophia Davis |
| Scrum Developer 5: | Mason Thompson |

Product Vision

|  |  |  |  |
| --- | --- | --- | --- |
| **Vision:** The vision of the project is to deliver a cutting-edge, user-friendly, and efficient learning management system that empowers users to achieve their learning goals seamlessly | | | |
| **Target Group** | **Needs** | **Products** | **Value** |
| **Market Segment:**  Students preparing for competitive exams (UPSC, SSC, Banking, etc.)  - Professionals seeking certifications  - Educators and trainers | **What problem does the product solve?**  Lack of immersive and interactive learning experiences  - Limited performance tracking for users  - Absence of adaptive learning based on individual needs | **What is the product?**  - Enhanced Learning Management System (LMS)  **Desirability:**  - Combines AR/VR for immersive learning experiences  - AI-driven personalized learning paths and analytics | **How does it benefit the company?**  - Attracts a broader audience with cutting-edge features  - Increases user retention and engagement  Business Goals:  - Achieve 30% user growth and 20% revenue increase within a year  - Improve student success rates by 25%. |
| **Who are the users?**  - Students  - Corporate employees  - Instructors and tutors | **What benefits does it provide?**  - Real-time feedback and performance insights  - Personalized learning experience  - Access to state-of-the-art technologies like AR/VR and AI | **Special Features:**  - AR/VR integration for engaging and immersive learning modules  - Advanced analytics for instructors and learners  - Adaptive testing and real-time tracking tools | **Business Model**:  - Subscription-based pricing with tiered plans  - Premium packages for advanced features like AR/VR and AI analytics. |

Document 3 : User Stories

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 1 | Tasks: 1 | | Priority: High |
| Value Statement:  As a student,  I want to access my enrolled courses easily,  so that I can start learning without delay. | | | |
| BV: 650 | | CP: 5 | |
| Acceptance Criteria:  A personalized dashboard is available for each student.  Students can view their enrolled courses after login.  Any technical issues preventing course access are logged automatically. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 2 | Tasks: 2 | | Priority: Medium |
| Value Statement:  As an instructor,  I want to upload course materials in multiple formats,  so that I can provide diverse learning resources to students. | | | |
| BV: 550 | | CP:4 | |
| Acceptance Criteria:  System supports PDF, video, audio, and image formats.  Upload status is displayed to the instructor.  Any file size restrictions are clearly communicated during upload. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 3 | Tasks: 3 | | Priority: High |
| Value Statement:  As a Student,  I want to track my course progress visually,  so that I can see how much of the course I’ve completed. | | | |
| BV: 700 | | CP: 6 | |
| Acceptance Criteria:  Progress is displayed as a percentage or progress bar.  Progress updates in real-time as lessons are completed.  Errors in tracking are flagged for review. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 4 | Tasks: 4 | | Priority: Medium |
| Value Statement:  As an Admin,  I want to assign roles to users,  so that permissions are controlled based on user type. | | | |
| BV: 600 | | CP: 4 | |
| Acceptance Criteria:  Role-based permissions are implemented successfully.  Unauthorized access attempts are logged and flagged.  Admins can update roles dynamically. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 5 | Tasks: 5 | | Priority: High |
| Value Statement:  As a Manager,  I want to receive weekly progress reports,  so that I can monitor team performance. | | | |
| BV: 750 | | CP: 5 | |
| Acceptance Criteria:  Progress reports are auto-generated every week.  Reports include detailed activity summaries and completion rates.  Errors in report generation are logged. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 6 | Tasks: 6 | | Priority: High |
| Value Statement:  As a Student,  I want to set reminders for course deadlines,  so that I can submit assignments on time. | | | |
| BV: 680 | | CP: 5 | |
| Acceptance Criteria:  Reminders are available via email or in-app notifications.  Notifications are triggered at user-defined intervals.  Delayed reminders are flagged for resolution. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 7 | Tasks: 7 | | Priority: Medium |
| Value Statement:  As an Instructor,  I want to grade assignments directly on the platform,  so that I can save time. | | | |
| BV: 600 | | CP: 4 | |
| Acceptance Criteria:  Grading tools support comments and annotations.  Grades are saved and shared with students in real-time.  Any errors in saving grades are logged and flagged. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 8 | Tasks: 8 | | Priority: High |
| Value Statement:  As an Admin,  I want to archive inactive courses,  so that the platform remains organized. | | | |
| BV: 500 | | CP: 4 | |
| Acceptance Criteria:  Courses inactive for 12 months are flagged.  Admins can archive courses manually or automatically.  Archived courses are stored securely and retrievable when needed. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 9 | Tasks: 9 | | Priority: High |
| Value Statement:  As a Student,  I want to search for courses using keywords,  so that I can find courses relevant to my interests. | | | |
| BV: 680 | | CP: 5 | |
| Acceptance Criteria:  The search feature provides real-time suggestions.  Results are displayed with course name, instructor, and ratings.  Errors in search results are logged. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 10 | Tasks: 10 | | Priority: Medium |
| Value Statement:  As an Instructor,  I want to communicate with students via announcements,  so that I can provide updates effectively. | | | |
| BV: 550 | | CP: 4 | |
| Acceptance Criteria:  Announcements are visible on the student dashboard.  Notifications are sent to students upon posting an announcement.  Students can flag technical issues with the announcement system. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 11 | Tasks: 11 | | Priority: High |
| Value Statement:  As a Student,  I want to receive automated feedback on quizzes,  so that I can identify areas for improvement. | | | |
| BV: 720 | | CP: 5 | |
| Acceptance Criteria:  Feedback is generated immediately after quiz submission.  Feedback highlights correct and incorrect answers with explanations.  Errors in feedback delivery are logged and flagged. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 12 | Tasks: 12 | | Priority: Medium |
| Value Statement:  As an Admin,  I want to monitor platform performance,  so that I can address technical issues proactively. | | | |
| BV: 650 | | CP: 4 | |
| Acceptance Criteria:  System generates daily performance reports (e.g., uptime, error rates).  Alerts are triggered for system anomalies (e.g., slow response times).  Admins can access historical performance data. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 13 | Tasks: 13 | | Priority: High |
| Value Statement:  As a Student,  I want to download certificates for completed courses,  so that I can showcase my achievements. | | | |
| BV: 700 | | CP: 5 | |
| Acceptance Criteria:  Certificates are generated with student name, course name, and completion date.  Certificates are downloadable in PDF format.  Errors in generation or download are flagged. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 14 | Tasks: 14 | | Priority: Medium |
| Value Statement:  As an Instructor,  I want to create custom quizzes for my courses,  so that I can assess student understanding. | | | |
| BV: 580 | | CP: 4 | |
| Acceptance Criteria:  Quiz creation supports multiple formats (MCQs, short answers, etc.).  Questions can include multimedia (images, videos).  Students can take quizzes without experiencing platform lags. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 15 | Tasks: 15 | | Priority: High |
| Value Statement:  As a Manager,  I want to review training effectiveness reports,  so that I can measure ROI on employee development programs. | | | |
| BV: 740 | | CP: 5 | |
| Acceptance Criteria:  Reports include completion rates, quiz scores, and feedback summaries.  Data visualization tools (charts/graphs) are included in the reports.  Errors in report generation are logged. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 16 | Tasks: 16 | | Priority: High |
| Value Statement:  As a Student,  I want to bookmark important lessons,  so that I can revisit them easily. | | | |
| BV: 680 | | CP: 5 | |
| Acceptance Criteria:  Bookmarking feature is available on all course content pages.  Bookmarked items appear in a dedicated "Bookmarks" section.  Bookmarks sync across devices. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 17 | Tasks: 17 | | Priority: Medium |
| Value Statement:  As an Instructor,  I want to track student activity logs,  so that I can identify students needing additional support. | | | |
| BV: 610 | | CP: 4 | |
| Acceptance Criteria:  Activity logs show login frequency, course progress, and quiz attempts.  Logs are filterable by date, course, or individual students.  Logs are updated in real-time. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 18 | Tasks: 18 | | Priority: High |
| Value Statement:  As a Student,  I want to view instructor ratings and reviews,  so that I can choose the best courses for my learning needs. | | | |
| BV: 720 | | CP: 5 | |
| Acceptance Criteria:  Ratings and reviews are displayed on the course details page.  Reviews are sortable by date, rating, and relevance.  Inappropriate reviews are flagged for moderation. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 19 | Tasks: 19 | | Priority: Medium |
| Value Statement:  As an Admin,  I want to assign instructors to specific courses,  so that course ownership is clear. | | | |
| BV: 640 | | CP: 4 | |
| Acceptance Criteria:  Admins can view a list of all instructors and courses.  Assignment changes reflect instantly on the platform.  Errors in assignment updates are flagged. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 20 | Tasks: 20 | | Priority: Hgh |
| Value Statement:  As a Student,  I want to receive personalized course recommendations,  so that I can discover courses aligned with my interests. | | | |
| BV: 750 | | CP: 6 | |
| Acceptance Criteria:  Recommendations are based on enrolled courses, completed courses, and preferences.  Students can mark recommended courses as “Not Interested.”  Recommendation algorithm performance is reviewed regularly. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 21 | Tasks: 21 | | Priority: High |
| Value Statement:  As a Manager,  I want to manage team learning plans,  so that I can align training with organizational goals. | | | |
| BV: 700 | | CP: 5 | |
| Acceptance Criteria:  Managers can assign courses to team members.  Team progress is visible on a single dashboard.  Notifications are sent to team members for new assignments. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 22 | Tasks: 22 | | Priority: Medium |
| Value Statement:  As an Instructor,  I want to set time limits for quizzes,  so that I can assess students’ time management skills. | | | |
| BV: 560 | | CP: 4 | |
| Acceptance Criteria:  Time limits are adjustable for each quiz.  Countdown timer is displayed to students during quizzes.  Quiz auto-submits when the time is up. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 23 | Tasks: 23 | | Priority: High |
| Value Statement:  As a Student,  I want to provide course feedback,  so that I can help improve the platform. | | | |
| BV: 650 | | CP: 5 | |
| Acceptance Criteria:  Feedback forms are available at the end of each course.  Feedback includes ratings, comments, and suggestions.  Feedback responses are analyzed for trends. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 24 | Tasks: 24 | | Priority: High |
| Value Statement:  As an Admin,  I want to ensure GDPR compliance for user data,  so that the platform meets legal requirements. | | | |
| BV: 800 | | CP: 6 | |
| Acceptance Criteria:  User data is encrypted at rest and in transit.  Users can request data deletion per GDPR guidelines.  Data access logs are maintained for compliance audits. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 25 | Tasks: 25 | | Priority: Higjh |
| Value Statement:  As a Student,  I want to access course materials offline,  so that I can continue learning without internet connectivity. | | | |
| BV: 760 | | CP: 6 | |
| Acceptance Criteria:  Course materials are downloadable in PDF or video format.  Downloaded content is accessible through the platform’s offline mode.  Content syncs automatically when the device reconnects to the internet. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 26 | Tasks: 26 | | Priority: Medium |
| Value Statement:  As an Instructor,  I want to set prerequisites for courses,  so that students meet the necessary requirements before enrollment. | | | |
| BV: 650 | | CP: 4 | |
| Acceptance Criteria:  Prerequisites are displayed on the course details page.  Students cannot enroll unless prerequisites are fulfilled.  Notifications guide students to meet missing prerequisites. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 27 | Tasks: 27 | | Priority: High |
| Value Statement:  As an Admin,  I want to generate detailed user activity reports,  so that I can monitor platform engagement and performance. | | | |
| BV: 730 | | CP: 5 | |
| Acceptance Criteria:  Reports include user login frequency, course enrollments, and quiz participation.  Data is exportable in CSV or Excel format.  Errors in report generation are logged and flagged. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 28 | Tasks: 28 | | Priority: High |
| Value Statement:  As a Manager,  I want to track employee learning hours,  so that I can ensure compliance with training mandates. | | | |
| BV: 710 | | CP: 5 | |
| Acceptance Criteria:  Learning hours are calculated automatically based on course activity.  Reports summarize hours by employee and department.  Errors in hour calculation are flagged for correction. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 29 | Tasks: 29 | | Priority: Medium |
| Value Statement:  As a Student,  I want to receive notifications for upcoming course deadlines,  so that I can complete tasks on time. | | | |
| BV: 670 | | CP: 4 | |
| Acceptance Criteria:  Notifications are sent for quizzes, assignments, and course completion deadlines.  Notifications are configurable (email, push, or SMS).  Deadlines are displayed on the student’s dashboard. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 30 | Tasks: 30 | | Priority: High |
| Value Statement:  As an Instructor**,** I want to create interactive course content, so that I can engage students effectively. | | | |
| BV: 750 | | CP: 6 | |
| Acceptance Criteria:  Content supports interactive elements like quizzes, polls, and drag-and-drop exercises.  Students can interact seamlessly with the elements across devices.  Errors in interactive content rendering are logged. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 31 | Tasks: 31 | | Priority: Medium |
| Value Statement:  As a Manager,  I want to create training groups,  so that I can assign courses to teams based on their roles. | | | |
| BV: 680 | | CP: 4 | |
| Acceptance Criteria:  Managers can create and name groups in the platform.  Group training progress is displayed in a dedicated dashboard.  Notifications are sent to group members for course assignments. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 32 | Tasks: 32 | | Priority: High |
| Value Statement:  As a Student,  I want to request additional course resources,  so that I can gain a deeper understanding of the subject matter. | | | |
| BV: 720 | | CP: 5 | |
| Acceptance Criteria:  Students can submit resource requests through the platform.  Instructors receive notifications for resource requests.  Requested resources are uploaded within a reasonable timeframe. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 33 | Tasks: 33 | | Priority: Medium |
| Value Statement:  As an Admin,  I want to manage platform user roles and permissions,  so that only authorized users have access to specific features. | | | |
| BV: 700 | | CP: 4 | |
| Acceptance Criteria:  Role-based permissions are configurable in the admin panel.  Unauthorized access attempts are logged and flagged.  Role updates reflect immediately on the platform. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 34 | Tasks: 34 | | Priority: High |
| Value Statement:  As a Student,  I want to access live Q&A sessions with instructors,  so that I can clarify doubts in real-time. | | | |
| BV: 750 | | CP: 6 | |
| Acceptance Criteria:  Live Q&A sessions are available for enrolled courses.  Students can submit questions before and during the session.  Session recordings are available for later viewing. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 35 | Tasks: 35 | | Priority: High |
| Value Statement:  As a Manager,  I want to review completion rates for assigned training programs,  so that I can assess the effectiveness of learning initiatives. | | | |
| BV: 740 | | CP: 5 | |
| Acceptance Criteria:  Completion rates are displayed as percentages and graphs.  Reports are filterable by date, department, or individual employees.  Errors in rate calculations are flagged for correction. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 36 | Tasks: 36 | | Priority: Medium |
| Value Statement:  As an Instructor,  I want to track student quiz performance analytics,  so that I can identify knowledge gaps. | | | |
| BV: 670 | | CP: 4 | |
| Acceptance Criteria:  Analytics include average scores, time spent on questions, and incorrect answers.  Data visualization tools highlight trends and gaps.  Errors in data tracking are logged. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 37 | Tasks: 37 | | Priority: High |
| Value Statement:  As an Admin,  I want to configure platform branding,  so that it aligns with the organization's identity. | | | |
| BV: 710 | | CP: 5 | |
| Acceptance Criteria:  Admins can upload a custom logo, change color themes, and update fonts.  Changes are reflected across all user interfaces.  Errors in branding configurations are logged and notified. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 38 | Tasks: 38 | | Priority: Medium |
| Value Statement:  As a Student,  I want to bookmark specific course content,  so that I can easily revisit key topics later. | | | |
| BV: 650 | | CP: 4 | |
| Acceptance Criteria:  Bookmark options are available for all course materials.  Bookmarked content is listed in a dedicated section for easy access.  Bookmarks are synced across devices. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 39 | Tasks: 39 | | Priority: High |
| Value Statement:  As a Manager,  I want to assign customized training paths to employees,  so that I can address individual learning needs. | | | |
| BV: 770 | | CP: 6 | |
| Acceptance Criteria:  Managers can create and assign personalized learning paths.  Employees receive notifications for assigned paths.  Completion progress is tracked and reported. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No: 40 | Tasks: 40 | | Priority: Medium |
| Value Statement:  As a Student,  I want to set personal goals for completing courses,  so that I can stay motivated and track my progress. | | | |
| BV: 690 | | CP: 4 | |
| Acceptance Criteria:  Goal-setting tools are integrated into the student dashboard.  Notifications remind students of their goals and deadlines.  Progress is visualized with goal completion percentages. | | | |

Document 4 : Agile PO Experience

Agile Product Owner Experience: LMS (Testbook) Enhancement Project

In the LMS (Testbook) Enhancement Project, I have played a key role in driving the product development process, ensuring that the solution meets market needs and aligns with company goals. My responsibilities span across strategic decision-making and Agile methodologies, including the following areas:

1. Markey Anaylsis:

* Conducted a detailed analysis of the current market needs and demands for learning platforms.
* Researched the availability of similar LMS solutions in the market to identify gaps and opportunities.
* Benchmarked features of competitors to ensure the Testbook LMS was competitive and innovative.

2. Enterprise Analysis:

* Performed due diligence on the market opportunity by analyzing current trends, user pain points, and feedback to validate the business case for the LMS enhancement.
* Evaluated the business value and cost-performance trade-offs to ensure project feasibility.

3. Product vision And Roadmap:

* Collaborated to define a clear product vision that aligned with the market need and Testbook's long-term goals.
* Developed a roadmap with high-level features and a timeline that balanced criticality, ROI, and technical feasibility.

4. Managing Product Features:

* Worked closely with stakeholders to prioritize features based on their business impact and user value.
* Reviewed and refined epics, stories, and features to ensure they met stakeholder expectations and user requirements.

5. Managing Product backlog:

* Actively participated in backlog refinement to prioritize and reprioritize user stories based on evolving stakeholder needs.
* Collaborated on epic planning to align high-level requirements with sprint goals.

6. Managing Overall Iteration Progress:

* Reviewed sprint progress and reprioritized sprints as necessary to address blockers or high-priority needs.
* Participated in sprint retrospectives to identify improvement areas and ensure alignment with business goals.

Agile Methodology Expertise:

As part of the LMS (Testbook) Enhancement Project, I have gained extensive experience in managing key Agile ceremonies, including:

Sprint Meetings:

1. Sprint Planning Meetings: Worked alongside the PO to break down epics into user stories, prioritize them, and define sprint goals. Ensured team members had a clear understanding of the objectives and deliverables for each sprint.

2. Daily Scrum Meetings: Attended daily scrums to track progress, provide clarifications, and address any blockers identified by the team.

3. Sprint Review Meetings: Collaborated with the PO to demonstrate completed features to stakeholders, collecting feedback for improvement.

4. Sprint Retrospective Meetings: Discussed lessons learned and identified actionable points to enhance the team's workflow and sprint execution.

5. Backlog Refinement Meetings: Refined the backlog to ensure stories were properly detailed, prioritized, and ready for development.

User Story Creation And Management:

In this project, I have been responsible for creating and managing detailed user stories that outline specific features and enhancement, ensuring that they are well-defined and actionable for the development team:

* Story No: Unique identifier for each story.
* Tasks: Breakdown of actionable steps for developers, testers, and designers.
* Priority: Level of urgency (High, Medium, Low) based on business needs.
* Acceptance Criteria: Defined conditions under which a story is deemed complete.
* BV & CP Value: Business Value (BV) and Complexity Points (CP) to estimate ROI and effort.

Collaboration as a Business Analyst:

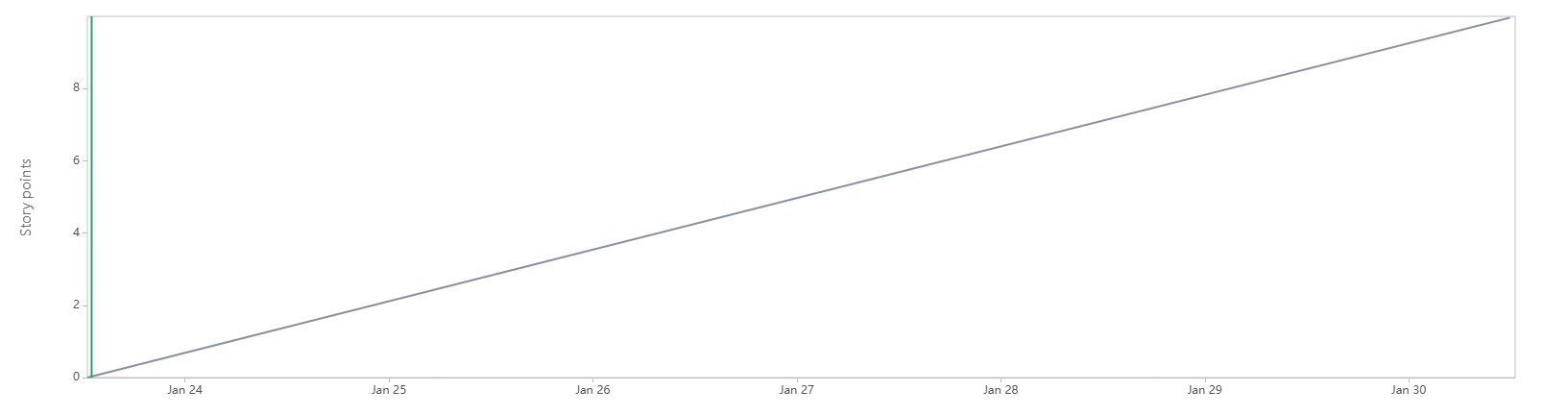
* Acted as a liaison between the PO, stakeholders, and the Scrum Team, ensuring smooth communication and alignment of goals.
* Assisted the PO in creating detailed product features and breaking them into manageable backlog items for the development team.
* Ensured all stories aligned with the product vision and roadmap, delivering measurable business value.

Document 5: Product and sprint backlog and product and sprint burndown charts

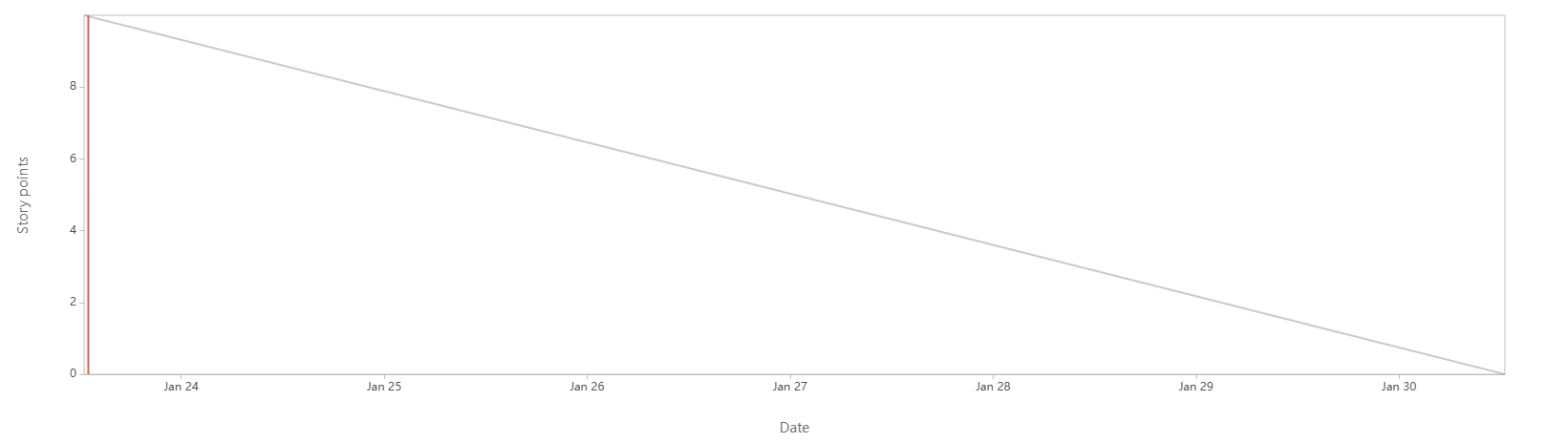
The Product Backlog is a dynamic, prioritized list of all the work and features that need to be completed in a project. It represents everything that is required to deliver a successful product. The Product Backlog is owned and managed by the Product Owner, and it evolves based on customer feedback, market conditions, and team input.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| User Story ID | User Story | Tasks | Priority | BV | CP | Sprint |
| US-01 | View course catalog | Design UI, Implement filters | High | 700 | 4 | Sprint 1 |
| US-02 | Enroll in a course | Design enrollment flow, Implement APIs | High | 800 | 5 | Sprint 1 |
| US-03 | Complete quizzes | Create quiz UI, Implement scoring logic | High | 750 | 4 | Sprint 1 |
| US-04 | Track learning progress | Integrate progress tracker, Testing | Medium | 600 | 3 | Sprint 2 |
| US-05 | Upload assignments | Build file upload module, Testing | High | 700 | 4 | Sprint 2 |
| US-06 | Provide course feedback | Create feedback UI, Integrate database | Medium | 500 | 3 | Sprint 3 |
| US-07 | Access learning history | Integrate history API, Testing | Medium | 600 | 4 | Sprint 3 |
| US-08 | Role-based permissions | Define roles, Implement restrictions | High | 900 | 5 | Sprint 2 |
| US-09 | Schedule live sessions | Create scheduling module, Notifications | Medium | 650 | 3 | Sprint 4 |
| US-10 | Participate in discussion forums | Design forum UI, Implement moderation | High | 750 | 4 | Sprint 4 |
| US-11 | Monitor onboarding progress | Design progress tracker, Testing | Medium | 550 | 3 | Sprint 5 |
| US-12 | Download course completion certificates | Build download feature, Validate design | High | 800 | 5 | Sprint 5 |
| US-13 | Customize profile settings | Create settings page, Testing | Medium | 600 | 3 | Sprint 6 |
| US-14 | Implement email notifications | Configure email APIs, Testing | High | 750 | 4 | Sprint 6 |
| US-15 | View leaderboard rankings | Create ranking system, Testing | Medium | 550 | 3 | Sprint 7 |
| US-16 | Integrate payment gateway | Set up gateway, Test transactions | High | 900 | 5 | Sprint 7 |
| US-17 | Add reminders for due assignments | Create reminder module, Testing | Medium | 650 | 3 | Sprint 8 |
| US-18 | Enable content sharing | Add sharing options, Configure access | Medium | 600 | 4 | Sprint 8 |
| US-19 | Create dark mode feature | Modify UI design, Add toggle switch | Medium | 500 | 3 | Sprint 9 |
| US-20 | Generate progress reports | Build reporting module, Validation | High | 850 | 4 | Sprint 9 |
| US-21 | Enable offline content access | Configure offline mode, Testing | High | 950 | 5 | Sprint 10 |
| US-22 | Secure data encryption | Implement encryption, Testing | High | 900 | 5 | Sprint 10 |
| US-23 | Support multilingual features | Translate UI, Integrate languages | High | 850 | 4 | Sprint 11 |
| US-24 | Allow instructors to upload materials | Build upload UI, Validation | High | 800 | 4 | Sprint 11 |
| US-25 | View instructor profiles | Design profile UI, Testing | Medium | 600 | 3 | Sprint 12 |
| US-26 | Create FAQs section | Build FAQ page, Integrate search | Medium | 500 | 3 | Sprint 12 |
| US-27 | Add video playback controls | Configure playback APIs, Testing | Medium | 650 | 3 | Sprint 13 |
| US-28 | Add visual dashboards | Design dashboard UI, Add filters | High | 900 | 5 | Sprint 13 |
| US-29 | Optimize search functionality | Improve algorithms, Testing | High | 850 | 4 | Sprint 14 |
| US-30 | Integrate third-party apps | Configure integrations, Testing | Medium | 700 | 4 | Sprint 14 |
| US-31 | Set default course templates | Build template module, Testing | Medium | 650 | 3 | Sprint 15 |
| US-32 | Add gamification features | Design badges, Integrate leaderboard | High | 900 | 5 | Sprint 15 |
| US-33 | Automate attendance tracking | Build tracking module, Testing | Medium | 700 | 4 | Sprint 16 |
| US-34 | Add customizable reminders | Design UI, Add reminder logic | Medium | 600 | 3 | Sprint 16 |
| US-35 | Implement API security standards | Add OAuth, Testing | High | 950 | 5 | Sprint 17 |
| US-36 | View detailed learning analytics | Build analytics dashboard, Validation | High | 900 | 4 | Sprint 17 |
| US-37 | Integrate chatbot for support | Configure chatbot, Test conversations | High | 950 | 5 | Sprint 18 |
| US-38 | Add survey functionality | Design survey UI, Add logic | Medium | 650 | 3 | Sprint 18 |
| US-39 | Notify about course updates | Add notification feature, Testing | Medium | 600 | 3 | Sprint 19 |
| US-40 | Generate audit logs | Build logging module, Testing | High | 850 | 4 | Sprint 19 |

Burnup Chart:



Sprint Burndown Chart:



The Sprint Backlog is a subset of the Product Backlog and consists of the tasks the team commits to completing in a specific Sprint (usually a 1-4 week iteration). The Sprint Backlog is owned by the Development Team and represents the work they plan to complete during the current sprint.

Sprint Burndown Chart

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| User Story ID | User Story | Tasks | Owner | Status | Estimated Effort (Hours) |
| US-01 | View course catalog | Design UI, Implement filters | Developer 1 | In Progress | 16 |
| US-02 | Enroll in a course | Design enrollment flow, Implement APIs | Developer 2 | To Do | 20 |
| US-03 | Complete quizzes | Create quiz UI, Implement scoring logic | Developer 3 | To Do | 18 |
| US-04 | Track learning progress | Integrate progress tracker, Testing | Developer 4 | To Do | 12 |
| US-05 | Upload assignments | Build file upload module, Testing | Developer 5 | To Do | 15 |
| US-06 | Provide course feedback | Create feedback UI, Integrate database | Developer 1 | To Do | 10 |
| US-07 | Access learning history | Integrate history API, Testing | Developer 2 | To Do | 14 |
| US-08 | Role-based permissions | Define roles, Implement restrictions | Developer 3 | In Progress | 20 |
| US-09 | Schedule live sessions | Create scheduling module, Notifications | Developer 4 | To Do | 16 |
| US-10 | Participate in discussion forums | Design forum UI, Implement moderation | Developer 5 | To Do | 14 |
| US-11 | Monitor onboarding progress | Design progress tracker, Testing | Developer 1 | To Do | 15 |
| US-12 | Download course completion certificates | Build download feature, Validate design | Developer 2 | To Do | 12 |
| US-13 | Customize profile settings | Create settings page, Testing | Developer 3 | In Progress | 10 |
| US-14 | Implement email notifications | Configure email APIs, Testing | Developer 4 | To Do | 8 |
| US-15 | View leaderboard rankings | Create ranking system, Testing | Developer 5 | To Do | 18 |
| US-16 | Integrate payment gateway | Set up gateway, Test transactions | Developer 1 | To Do | 20 |
| US-17 | Add reminders for due assignments | Create reminder module, Testing | Developer 2 | To Do | 14 |
| US-18 | Enable content sharing | Add sharing options, Configure access | Developer 3 | To Do | 15 |
| US-19 | Create dark mode feature | Modify UI design, Add toggle switch | Developer 4 | To Do | 10 |
| US-20 | Generate progress reports | Build reporting module, Validation | Developer 5 | To Do | 12 |
| US-21 | Enable offline content access | Configure offline mode, Testing | Developer 1 | In Progress | 16 |
| US-22 | Secure data encryption | Implement encryption, Testing | Developer 2 | To Do | 18 |
| US-23 | Support multilingual features | Translate UI, Integrate languages | Developer 3 | To Do | 22 |
| US-24 | Allow instructors to upload materials | Build upload UI, Validation | Developer 4 | To Do | 14 |
| US-25 | View instructor profiles | Design profile UI, Testing | Developer 5 | To Do | 10 |
| US-26 | Create FAQs section | Build FAQ page, Integrate search | Developer 1 | To Do | 12 |
| US-27 | Add video playback controls | Configure playback APIs, Testing | Developer 2 | To Do | 15 |
| US-28 | Add visual dashboards | Design dashboard UI, Add filters | Developer 3 | To Do | 20 |
| US-29 | Optimize search functionality | Improve algorithms, Testing | Developer 4 | To Do | 18 |
| US-30 | Integrate third-party apps | Configure integrations, Testing | Developer 5 | To Do | 22 |
| US-31 | Set default course templates | Build template module, Testing | Developer 1 | To Do | 16 |
| US-32 | Add gamification features | Design badges, Integrate leaderboard | Developer 2 | To Do | 20 |
| US-33 | Automate attendance tracking | Build tracking module, Testing | Developer 3 | To Do | 14 |
| US-34 | Add customizable reminders | Design UI, Add reminder logic | Developer 4 | To Do | 12 |
| US-35 | Implement API security standards | Add OAuth, Testing | Developer 5 | To Do | 20 |
| US-36 | View detailed learning analytics | Build analytics dashboard, Validation | Developer 1 | To Do | 18 |
| US-37 | Integrate chatbot for support | Configure chatbot, Test conversations | Developer 2 | To Do | 25 |
| US-38 | Add survey functionality | Design survey UI, Add logic | Developer 3 | To Do | 12 |
| US-39 | Notify about course updates | Add notification feature, Testing | Developer 4 | To Do | 10 |
| US-40 | Generate audit logs | Build logging module, Testing | Developer 5 | To Do | 15 |

Document 6: Sprint Meeting

Meeting Type 1: Sprint Planning Meeting

|  |  |
| --- | --- |
| Date | January 25,2025 |
| Time | 10:00 Am- 12:00 PM |
| Location | Conference Room B, Testbook HQ |
| Prepared By | Sarah Williams |
| Attendees | Mr. Zeke (Scrum Master), Mr. Joy (Product Owner), Scrum Developers (Emily, Liam, Noah, Ava, Ethan), Sarah Williams (BA), Mike (Network Admin), John (DB Admin) |

|  |  |  |
| --- | --- | --- |
| Topic | Presenter | Time Allotted |
| Sprint Objectives and Goals | Mr. Zeke | 15 mins |
| Review of product backlog items | Mr. Joy | 20 mins |
| Prioritization of user stories | Ms. Sarah Williams | 30 mins |
| Estimation and capacity planning | Scrum Team Members | 25 mins |
| Discussion of Sprint Challenges | Mr. Mike | 15 mins |
| Wrap-up and action items | Mr. Zeke | 15 mins |

|  |  |
| --- | --- |
| Field | Details |
| Observer | Mr. Karthik, Ms. Alekya |
| Resources | Sprint Backlog, Laptops, Whiteboard, Markers, Projector, Coffee and Snacks |
| Special Notes | Ensure all participants have reviewed the backlog and priorities beforehand. Scrum team to finalize user stories before the meeting ends. |

Meeting Type 2: Sprint Review Meeting

|  |  |
| --- | --- |
| Date | January 30, 2025 |
| Time | 2:00 PM - 3:30 PM |
| Location | Conference Room A, Testbook HQ |
| Prepared By | Sarah Williams |
| Attendees | Mr. Zeke (Scrum Master), Mr. Joy (Product Owner), Scrum Developers (Emily, Liam, Noah, Ava, Ethan), Sarah Williams (BA), Stakeholders (Mr. Karthik, Ms. Alekya) |

|  |  |  |  |
| --- | --- | --- | --- |
| Sprint status | Things to Demo | Quick updates | What’s next |
| Sprint 1 successfully completed with 85% of user stories delivered. Remaining stories have been moved to the Sprint 2 backlog for completion. | New advanced quiz module with progress tracking.  Notifications feature for assignment deadlines. | Stakeholder feedback gathered during the demo session  - Minor UI fixes identified in the reporting module  - All identified bugs have been logged for Sprint 2 | Prioritize remaining tasks for Sprint 2  - Plan to incorporate stakeholder feedback into Sprint 2  - Ensure thorough testing before the next sprint review |

Meeting Type 3: Sprint retrospective meeting

|  |  |
| --- | --- |
| Date | February 3, 2025 |
| Time | 3:00 PM - 4:30 PM |
| Location | Conference Room B, Testbook HQ |
| Prepared By | Ms. Sarah Williams |
| Attendees | Mr. Zeke (Scrum Master), Mr. Joy (Product Owner), Scrum Developers (Emily, Liam, Noah, Ava, Ethan), Sarah Williams (BA), QA Team Representatives |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Agenda | What went well | What didn’t go well | Questions | Reference |
| Sprint Review | Smooth integration of APIs and role-based permissions. | Dashboard design took longer than expected. | How can we streamline design approvals? | Sprint Review Notes |
| Performance Testing | Improved system performance after optimization. | Delayed feedback from QA on bugs. | How can we ensure quicker QA responses? | Testing Logs |
| Stakeholder Feedback | Positive feedback on role-based permissions and functionality. | Some dashboard KPIs were unclear. | Can we refine KPI requirements upfront? | Stakeholder Review Feedback |
| Team Collaboration | Effective communication among team members. | Some resource dependencies caused delays. | How can we avoid such bottlenecks in future? | Resource Allocation Plan |

Meeting Type 4: Daily Stand-up meeting

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Questions | Name/Role | Week “X” (from dd-mm-yyyy to dd-mm-yyyy) | | | | | | |
| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
| What did you do yesterday? | Developer 1 | Refactored backend APIs for the LMS. | Tested API integration with the frontend. | Debugged API issues reported by QA. | Coordinated with QA for end-to-end testing. | Resolved major API bugs. | Prepared final API deployment. |  |
| Developer 2 | Fixed UI bugs reported by QA. | Designed LMS dashboard layout. | Finalized KPIs for progress tracking. | Implemented dynamic elements on the dashboard. | Tested dashboard on different devices. | Made adjustments based on feedback. |  |
| Developer 3 | Completed unit tests for Role-Based Permissions. | Deployed role-based permissions for stakeholder testing. | Fixed permission-related errors. | Performed stakeholder testing. | Resolved all stakeholder-reported issues. | Prepared permissions module for release. |  |
| What will you do today? | Developer 1 | Test API integration with the LMS frontend. | Debug reported API issues. | Conduct a joint review with QA. | Finalize API testing and performance tuning. | Ensure APIs meet performance benchmarks. | Deploy the final version. |  |
| Developer 2 | Finalize the dashboard design for progress tracking. | Develop dynamic progress tracking charts. | Test dashboard functionality. | Address compatibility issues. | Validate dashboards for client review. | Submit dashboards for stakeholder feedback. |  |
| Developer 3 | Deploy role-based permissions for stakeholder testing. | Fix permission errors found during deployment. | Test permissions functionality thoroughly. | Document permission settings. | Complete final checks and documentation. | Release permissions module. |  |
| What (if any) is blocking your progress? | Developer 1 | Awaiting approval for test server access. | Dependency on QA team for API feedback. | Need database admin input for optimization. | Awaiting stakeholder testing feedback. | Finalizing API documentation. | Setting up the production server. |  |
| Developer 2 | Need clarification on dashboard KPIs from PO. | Performance testing resources are delayed. | Requires backend team input for data points. | Stakeholder review delays. | Preparing for final stakeholder demo. | Reviewing dashboard analytics with stakeholders. |  |
| Developer 3 | Encountering errors with permission settings. | Lack of documentation for permission rules. | Need stakeholder feedback on testing outcomes. | Fixing unexpected UI behavior in the permission module. | Addressing final UI/UX adjustments. | Collaborating with stakeholders on final testing. |  |