CSD-3423 - Intro to Project Management

Group Name: SIX SIGMAS

Team Members:

|  |  |  |
| --- | --- | --- |
| HINALI TEJANI | C0934641 | Product Owner |
| RUTUL TEJANI | C0939251 | Scrum Master |
| RISHABH KALATHIYA | C0940001 | UI/UX Designer |
| SMIT SHAH | C0940753 | Frontend Developer |
| PARTH CHAK | C0935421 | Backend Developer |
| NISARG JOSHI | C0943510 | Tester |

Each Team Member’s role on the project (Product Owner, Scrum Master, Cross Functional Team Members):

|  |  |  |
| --- | --- | --- |
| Role | Name | Responsibilities |
| Product Owner | Hinali Tejani | * Define the vision and strategy for the product. * Prioritize the product backlog based on stakeholder needs and value. * Communicate with stakeholders and gather feedback. * Ensure the team understands the product requirements and goals. * Make decisions regarding feature releases and product improvements. |
| Scrum Master | Rutul Tejani | * Facilitate Scrum ceremonies (daily stand-ups, sprint planning, sprint reviews, and retrospectives). * Remove impediments and ensure the team’s productivity. * Coach the team on Agile and Scrum principles. * Protect the team from external interruptions and distractions. * Promote a collaborative and healthy team environment. |
| UI/UX Designer | Rishabh Kalathiya | * Participate in sprint planning, reviews, and retrospectives. * Collaborate to design, develop, test, and deliver product increments. * Estimate work and commit to sprint goals. * Maintain a sustainable pace of work. * Contribute to continuous improvement efforts. |
| Frontend Developer | Smit Shah |
| Backend Developer | Parth Chak |
| Tester | Nisarg Joshi |

**5 Scrum events held during your project:**

1. **Sprint Planning**

* **Description:**

Sprint Planning is a meeting that kicks off the sprint, where the team discusses and selects the items from the product backlog that will be worked on during the sprint. It sets the direction and scope of the sprint, defining the sprint goal.

* **Key Components:**
  + Reviewing the product backlog and selecting items for the sprint.
  + Estimating the effort required for each item.
  + Defining the sprint goal.
* **Team Roles:**
  + **Hinali Tejani (Product Owner):**

Presented the prioritized backlog and clarified item requirements.

* + **Rutul Tejani (Scrum Master):**

Facilitated the meeting and ensured the team understood the sprint’s scope and goals.

* + **Nisarg Joshi, Rishabh Kalathiya, Smit Shah, Parth Chak (Cross-Functional Team Members):** Provided effort estimates and committed to delivering the selected items.
* **Outcome(s):**
  + A clearly defined sprint goal.
  + A sprint backlog with the items the team committed to completing.
  + An understanding of the sprint’s priorities and workload.

1. **Daily Stand-Up**

* **Description:**

The Daily Stand-Up is a short meeting held every day of the sprint where team members share updates on their progress, plans for the day, and any obstacles they face.

* **Key Components:**
  + Each member answers three key questions:
    - What did I do yesterday?
    - What will I do today?
    - What obstacles are in my way?
* **Team Roles:**
  + **Hinali Tejani (Product Owner):**

Observed the meeting to stay informed about the team’s progress and challenges.

* + **Rutul Tejani (Scrum Master):**

Facilitated the meeting, ensuring it remained focused and brief.

* + **Nisarg Joshi, Rishabh Kalathiya, Smit Shah, Parth Chak (Cross-Functional Team Members):** Shared updates on their progress and highlighted any impediments.
* **Outcome(s):**
  + Improved transparency and coordination among team members.
  + Identification of obstacles and their resolution.
  + Alignment of daily activities with the sprint goal.

1. **Sprint Review**

* **Description:**

The Sprint Review is a meeting held at the end of the sprint to showcase the work completed during the sprint to the stakeholders. It provides an opportunity for feedback and aligns the team with stakeholders’ expectations.

* **Key Components:**
  + Demonstration of the completed work.
  + Feedback from stakeholders.
  + Discussion of the next steps.
* **Team Roles:**
  + **Hinali Tejani (Product Owner):**

Collected feedback from stakeholders and provided insights on how the completed work aligns with the product vision.

* + **Rutul Tejani (Scrum Master):**

Facilitated the meeting, ensuring stakeholder feedback was constructive and focused.

* + **Nisarg Joshi, Rishabh Kalathiya, Smit Shah, Parth Chak (Cross-Functional Team Members):** Presented their work and addressed questions or feedback.
* **Outcome(s):**
  + Validation of completed work and its alignment with expectations.
  + Constructive feedback for future sprints.
  + Adjustment of the product backlog based on feedback.

1. **Sprint Retrospective**

* **Description:**

The Sprint Retrospective is a meeting held after the Sprint Review where the team reflects on the sprint and discusses what went well, what didn’t, and how processes can be improved.

* **Key Components:**
  + Reflection on the sprint’s successes and challenges.
  + Identification of areas for improvement.
  + Creation of actionable improvement plans.
* **Team Roles:**
  + **Hinali Tejani (Product Owner):**

Participated in the discussion, providing feedback on team performance from a product perspective.

* + **Rutul Tejani (Scrum Master):**

Facilitated the meeting and guided the team in identifying improvement areas.

* + **Nisarg Joshi, Rishabh Kalathiya, Smit Shah, Parth Chak (Cross-Functional Team Members):** Shared their perspectives on the sprint and contributed to improvement discussions.
* **Outcome(s):**
  + Identification of what went well and what didn’t during the sprint.
  + An improvement plan for the next sprint.
  + Enhanced team collaboration and morale.

1. **Product Backlog Refinement**

* **Description:**

Product Backlog Refinement is an ongoing process where the product backlog items are reviewed and prioritized to ensure they are ready for future sprints.

* **Key Components:**
  + Reviewing and updating backlog items.
  + Prioritizing items based on product goals and stakeholder feedback.
  + Estimating the effort for each item.
* **Team Roles:**
  + **Hinali Tejani (Product Owner):**

Led the session, clarifying and prioritizing backlog items based on product strategy.

* + **Rutul Tejani (Scrum Master):**

Ensured the refinement session was efficient and that items were clearly defined.

* + **Nisarg Joshi, Rishabh Kalathiya, Smit Shah, Parth Chak (Cross-Functional Team Members):** Provided input on the feasibility and estimation of backlog items.
* **Outcome(s):**
  + A prioritized and refined product backlog.
  + Clear understanding of upcoming work and priorities.
  + Improved readiness for the next sprint planning.

**User Stories:**  
Here’s 24 User stories which is targeting different user roles and needs.

1. **As a prospective student**, I need a detailed course curriculum page so that I can understand what topics will be covered and how it will benefit my career.
2. **As a marketing specialist**, I need a section to showcase student testimonials so that we can build trust and credibility with potential students.
3. **As a prospective international student**, I need information about visa requirements and support services so that I can plan my study abroad experience confidently.
4. **As an admissions officer**, I need an online application form so that I can easily process applications and communicate with applicants.
5. **As a course instructor**, I need a secure portal to upload course materials and assignments so that students can access them at any time.
6. **As a website visitor**, I need a FAQ section so that I can quickly find answers to common questions without having to contact support.
7. **As a course coordinator**, I need a schedule page with session timings and important dates so that students can stay informed about class schedules and deadlines.
8. **As an enrolled student**, I need a dashboard to track my progress and view my grades so that I can monitor my performance throughout the course.
9. **As a website developer**, I need a responsive design for the website so that it looks and functions well on all devices, including mobile, tablet, and desktop.
10. **As a prospective student**, I need a feature to request more information or a call back so that I can speak with a representative to get my specific questions answered.
11. **As a financial aid officer**, I need a section to provide information about scholarships and payment plans so that students can understand their financial options.
12. **As a prospective student**, I need a page highlighting the career opportunities and job placement support available so that I can see the potential benefits of completing the course.
13. **As a marketing specialist**, I need an SEO-optimized blog section to publish articles about full-stack development trends and success stories so that we can attract more organic traffic to the website.
14. **As a course alumni**, I need an alumni network page so that I can stay connected with former classmates and explore networking opportunities.
15. **As an accessibility specialist**, I need the website to be compliant with accessibility standards so that all users, including those with disabilities, can access the information.
16. **As a prospective student**, I need a virtual tour feature so that I can explore the campus and facilities from the comfort of my home.
17. **As a customer service representative**, I need a live chat feature so that I can assist website visitors in real-time with their inquiries.
18. **As a prospective student**, I need a page showcasing the faculty members and their qualifications so that I can learn more about the instructors' expertise.
19. **As a course content creator**, I need a secure area to upload and manage multimedia content like videos and slides so that students have access to high-quality learning materials.
20. **As a parent of a prospective student**, I need a page that outlines the course's value and potential return on investment so that I can support my child's decision-making process.
21. **As a prospective student**, I need testimonials from alumni who have successfully transitioned into tech careers so that I can be inspired and motivated to join the course.
22. **As a social media manager**, I need social sharing buttons on key pages so that visitors can easily share the course details with their networks.
23. **As a prospective student**, I need a comparison chart of different courses offered so that I can choose the one that best fits my interests and career goals.
24. **As a website administrator**, I need analytics tracking integrated into the website so that I can monitor visitor behavior and improve the user experience.

**Acceptance criteria for each user story:**  
The acceptance criteria for each user story ensure each feature is developed to meet specific standards and user needs.

**Sprint 1: Foundation and Core Features**

1. **Prospective Student: Detailed course curriculum page**
   * Course modules, topics, duration, and key learning outcomes are listed clearly.
   * The page is accessible and easy to navigate.
   * Users can download or print the curriculum.
2. **Admissions Officer: Online application form**
   * Form fields include personal info, educational background, and a statement of purpose.
   * Validation is in place for mandatory fields.
   * Users receive a confirmation email after submission.
3. **Website Visitor: FAQ section**
   * FAQs cover at least 15 common questions.
   * Users can search or filter FAQs.
   * Answers are concise and provide links to detailed pages if needed.
4. **Course Coordinator: Schedule page with session timings**
   * Schedule includes all relevant dates and class timings.
   * The page can be updated regularly and easily.
   * Users can add events to their personal calendars.
5. **Website Developer: Responsive design for all devices**
   * The website is fully responsive on desktops, tablets, and smartphones.
   * Layout and navigation adjust smoothly across devices.
   * All features and content are accessible and functional on each device.
6. **Customer Service Representative: Live chat feature**
   * The chat is available during specified hours.
   * Users receive a response within two minutes.
   * Chat transcripts are saved for reference.
7. **Accessibility Specialist: Website compliant with accessibility standards**
   * The website meets WCAG 2.1 Level AA criteria.
   * All images have alt text, and videos are captioned.
   * The website is navigable by keyboard.
8. **Website Administrator: Analytics tracking integrated into the website**
   * Google Analytics (or similar) is installed and configured.
   * Key metrics like page views, session duration, and bounce rate are tracked.
   * Monthly reports are generated for review.

**Sprint 2: Enhancements and Support**

1. **Marketing Specialist: Showcase student testimonials**
   * Testimonials include names, photos, and quotes from students.
   * A minimum of five testimonials are featured.
   * Testimonials are displayed in a visually appealing format.
2. **International Student: Visa requirements and support services**
   * Comprehensive information on visa types and requirements.
   * Links to official visa resources and application guides.
   * Contact information for visa support services.
3. **Course Instructor: Secure portal for course materials**
   * Only enrolled students and faculty can access the portal.
   * Materials include lecture notes, slides, and assignments.
   * Uploads are secure and version-controlled.
4. **Enrolled Student: Dashboard to track progress and view grades**
   * Students can view their course progress and grades in real-time.
   * The dashboard includes a calendar of upcoming assignments.
   * Notifications are sent for new grades or feedback.
5. **Financial Aid Officer: Information about scholarships and payment plans**
   * Detailed descriptions of scholarships and eligibility criteria.
   * Payment plans are explained with a clear breakdown of installments.
   * Contact form for financial aid queries.
6. **Prospective Student: Feature to request more information or a call back**
   * A form allows users to enter their contact details and preferences.
   * Requests are acknowledged within 24 hours.
   * Users can schedule a preferred time for a call back.
7. **Social Media Manager: Social sharing buttons on key pages**
   * Share buttons are placed on all blog posts and course pages.
   * Sharing is supported for Facebook, Twitter, LinkedIn, and email.
   * Shared content includes a link, title, and image preview.
8. **Prospective Student: Page showcasing faculty members and their qualifications**
   * Faculty profiles include photos, bios, and areas of expertise.
   * A minimum of ten faculty members are featured.
   * Contact information for each faculty member is provided.

**Sprint 3: Additional Features and Optimization**

1. **Prospective Student: Page highlighting career opportunities and job placement support**
   * Information on potential career paths and average salaries.
   * Success stories from alumni with current job titles and companies.
   * Details of the job placement support program.
2. **Marketing Specialist: SEO-optimized blog section**
   * Blog posts are keyword-optimized and include meta descriptions.
   * Posts cover industry news, trends, and student success stories.
   * Users can subscribe to receive new blog updates.
3. **Course Alumni: Alumni network page**
   * Alumni can create profiles and connect with other alumni.
   * A directory of alumni by graduation year or location.
   * Alumni events and news are featured on the page.
4. **Prospective Student: Virtual tour feature**
   * A 360-degree tour of the campus and facilities is available.
   * Users can navigate through different parts of the tour easily.
   * The tour is accessible on all devices.
5. **Course Content Creator: Secure area for multimedia content**
   * Videos, podcasts, and interactive materials are uploaded securely.
   * Access is restricted to enrolled students.
   * Content is organized by course and module.
6. **Parent of Prospective Student: Page outlining course value and ROI**
   * Details on potential career paths and average salaries post-graduation.
   * Testimonials from parents of successful alumni.
   * Information on tuition fees and payment options.
7. **Prospective Student: Testimonials from alumni who transitioned into tech careers**
   * Alumni profiles include photos, job titles, and companies.
   * At least five testimonials from alumni in tech roles.
   * Success stories highlight the relevance of the course to their careers.
8. **Prospective Student: Comparison chart of different courses offered**
   * Courses are compared based on duration, cost, and outcomes.
   * The chart is easy to read and visually appealing.
   * Links to detailed pages for each course are provided.

**Burndown Chart:**

A graph showing a blue and red line

Description automatically generated

**Detailed Description of MVP (Minimum Viable Product):**

To release a functional and user-friendly website that provides essential information about the Full Stack Development course to prospective students, allows admissions processing, and ensures basic accessibility and responsiveness.

**Key Features and Description**

* 1. **Course Curriculum Page**
* **Description:**

A comprehensive page detailing the Full Stack Development course curriculum, including modules, topics, duration, and key learning outcomes.

* **Details:**
  + Lists all modules and topics covered in the course.
  + Provides an overview of course objectives and expected outcomes.
  + Includes options to download or print the curriculum.
  1. **Online Application Form**
* **Description:**

A secure and straightforward form that allows prospective students to apply for the course online.

* **Details:**
  + Form fields include personal information, educational background, and a statement of purpose.
  + Features field validation and mandatory fields to ensure completeness.
  + Sends a confirmation email upon successful submission.

**3. FAQ Section**

* **Description:**

A dedicated section addressing frequently asked questions to assist visitors with common inquiries.

* **Details:**
  + Covers at least 15 common questions regarding the course, application process, fees, etc.
  + Includes a search or filter option for easy navigation.
  + Answers are concise with links to detailed pages for more information.

**4. Schedule Page with Session Timings**

* **Description:**

A page displaying the schedule of classes and other important dates, such as application deadlines and events.

* **Details:**
  + Provides a clear and detailed schedule of all sessions and events.
  + Features an option to sync events with personal calendars (e.g., Google Calendar).
  + Updated regularly by the Course Coordinator to reflect changes.

**5. Responsive Design for All Devices**

* **Description:**

Ensures the website is accessible and visually appealing on various devices, including desktops, tablets, and smartphones.

* **Details:**
  + Utilizes responsive web design techniques for optimal display across devices.
  + Navigation, layout, and content adjust smoothly to different screen sizes.
  + All features remain functional regardless of the device used.

**6. Live Chat Feature**

* **Description:**

An interactive live chat service to assist website visitors with queries in real-time.

* **Details:**
  + Available during specific hours to handle inquiries about the course.
  + Ensures quick response times (within two minutes) to user questions.
  + Chat transcripts are saved and can be accessed by the customer service team.

**7. Website Compliance with Accessibility Standards**

* **Description:**

The website is built to be inclusive and accessible to all users, including those with disabilities.

* **Details:**
  + Adheres to WCAG 2.1 Level AA standards.
  + Features like alt text for images, captions for videos, and keyboard navigability are included.
  + Regular audits are conducted to ensure ongoing compliance.

**8. Analytics Tracking Integrated into the Website**

* **Description:**

Implementation of analytics tools to monitor website traffic and user behavior.

* **Details:**
  + Google Analytics or a similar tool is configured to track key metrics.
  + Data such as page views, session duration, and bounce rates are monitored.
  + Monthly reports are generated for performance review and strategic planning.

**Outcomes and Benefits**

The MVP release ensures that prospective students have access to critical information and resources needed to make informed decisions about enrolling in the Full Stack Development course. Admissions officers and customer service representatives are equipped with tools to efficiently manage inquiries and applications. Additionally, the MVP lays a solid foundation for the website, ensuring it is accessible, responsive, and ready for future enhancements and additions.

**Detailed Breakdown of Sprint:**

Here’s a detailed breakdown of each sprint for the full-stack development course website project, including sprint goals, Kanban board structure, user stories, prioritized features, and tasks associated with each user story.

### **Sprint 1: Foundation and Core Features**

**Sprint Goal:**

Establish the core framework and basic functionalities of the website to provide essential course information and an initial user experience.

**Kanban Board Structure:**

* **To Do:**
  + Develop course curriculum page
  + Create online application form
  + Build FAQ section
  + Implement responsive design
  + Schedule page with session timings
* **In Progress:**
  + Integrate live chat feature
  + Analytics tracking integration
* **Done:**
  + None initially

**User Stories:**

1. **As a Prospective Student,** I need a detailed course curriculum page so that I can understand what I will learn and decide if the course is right for me.
2. **As an Admissions Officer,** I need an online application form so that students can easily apply for the course.
3. **As a Website Visitor,** I need an FAQ section so that I can quickly find answers to my questions.
4. **As a Website Developer,** I need responsive design so that the website looks good on all devices.
5. **As a Course Coordinator,** I need a schedule page with session timings so that students can plan their attendance.

**Prioritized List of Features and Tasks:**

1. **Course Curriculum Page**
   * Design the layout
   * List all course modules and topics
   * Include key learning outcomes
2. **Online Application Form**
   * Create form fields for personal info and educational background
   * Implement form validation
   * Set up confirmation email system
3. **FAQ Section**
   * Identify common questions
   * Write concise answers
   * Implement search functionality
4. **Responsive Design**
   * Test and adjust layout for desktop, tablet, and mobile
   * Optimize images and text for different screen sizes
5. **Schedule Page**
   * List all sessions and dates
   * Allow users to sync with personal calendars

### **Sprint 2: Enhancements and Support**

**Sprint Goal:**

Enhance the website by adding user engagement features and improving the support structure.

**Kanban Board Structure:**

* **To Do:**
  + Showcase student testimonials
  + Provide visa requirements and support services
  + Create secure portal for course materials
  + Develop dashboard to track student progress and grades
* **In Progress:**
  + Information about scholarships and payment plans
* **Done:**
  + Implement responsive design
  + Online application form

**User Stories:**

1. **As a Marketing Specialist,** I need to showcase student testimonials so that I can attract more students to the course.
2. **As an International Student,** I need information on visa requirements and support services so that I can prepare for my studies.
3. **As a Course Instructor,** I need a secure portal for course materials so that I can provide resources only to enrolled students.
4. **As an Enrolled Student,** I need a dashboard to track my progress and view grades so that I can stay informed about my academic performance.

**Prioritized List of Features and Tasks:**

1. **Student Testimonials**
   * Collect testimonials from former students
   * Design testimonial section layout
   * Include student photos and quotes
2. **Visa Requirements and Support**
   * Compile visa information for international students
   * Link to official resources
   * Provide contact info for support services
3. **Secure Portal for Course Materials**
   * Set up secure login system
   * Organize course materials by module
   * Implement access controls
4. **Student Dashboard**
   * Display grades and feedback
   * Include calendar of assignments
   * Notify students of updates

### **Sprint 3: Additional Features and Optimization**

**Sprint Goal:**

Finalize the website with additional features, optimize user experience, and ensure robust support systems are in place.

**Kanban Board Structure:**

* **To Do:**
  + Career opportunities and job placement support page
  + SEO-optimized blog section
  + Alumni network page
  + Virtual tour feature
* **In Progress:**
  + Multimedia content area for course content
* **Done:**
  + Dashboard to track student progress
  + Showcase student testimonials

**User Stories:**

1. **As a Prospective Student,** I need a page highlighting career opportunities and job placement support so that I can see the potential return on investment of the course.
2. **As a Marketing Specialist,** I need an SEO-optimized blog section so that I can increase the website’s visibility.
3. **As a Course Alumni,** I need an alumni network page so that I can connect with other alumni and stay informed about events.
4. **As a Prospective Student,** I need a virtual tour feature so that I can explore the campus remotely.

**Prioritized List of Features and Tasks:**

1. **Career Opportunities Page**
   * List potential careers and average salaries
   * Include success stories from alumni
   * Detail job placement support
2. **SEO-Optimized Blog Section**
   * Write and publish blog posts
   * Optimize posts with keywords and meta descriptions
   * Allow users to subscribe for updates
3. **Alumni Network Page**
   * Create alumni profiles and directory
   * Feature alumni events and news
   * Enable alumni connections
4. **Virtual Tour Feature**
   * Develop 360-degree campus tour
   * Implement navigation tools
   * Ensure compatibility across devices

This structured approach ensures a clear roadmap for the project, with each sprint focusing on specific goals and delivering tangible features.