**Software Project Sample Document**

**Course Project: Software Project Management**

**Artifact 1: Overview, Organizational Structure, and Scope**

**Overview**

**Project Name:** Online Bookstore

**Project Description:** The Online Bookstore project aims to develop a web-based application for purchasing books online. This project will provide a user-friendly platform for customers to search, browse, and order books while also enabling admins to manage inventory, customers, and sales data.

**Organizational Structure**

1. **Project Manager:** Responsible for planning, executing, and closing the project.
2. **Business Analyst:** Responsible for gathering and analyzing project requirements from stakeholders.
3. **Software Architect:** Responsible for designing the high-level architecture of the system.
4. **Development Team:** Responsible for implementing the project's features and functionalities.
5. **Quality Assurance Team:** Responsible for ensuring the project meets the defined quality standards.
6. **UI/UX Designer:** Responsible for designing the user interface and user experience.
7. **Database Administrator:** Responsible for managing the project's database.

**Scope**

**In-Scope**

1. User registration and authentication
2. Search and browse books
3. Add books to a shopping cart and manage it
4. Order processing and payment integration
5. Inventory management for admins
6. Customer management for admins
7. Sales reporting for admins

**Out-of-Scope**

1. Book recommendations
2. Integration with third-party book suppliers
3. Mobile application development

**Artifact 2: Methodology Analysis, Risks, and Decision**

**Methodology Analysis**

The Online Bookstore project will use Agile Scrum methodology for development. This approach is chosen due to its iterative nature, which enables frequent delivery of working software and continuous improvement. The development process will consist of sprints, with each sprint lasting two weeks.

**Risks**

1. **Scope Creep:** Uncontrolled changes to the project scope can lead to delays and increased costs.
2. **Insufficient Resources:** Lack of adequate resources can impact the project's progress and quality.
3. **Technology Risks:** The chosen technology stack may not meet the project requirements or may be difficult to implement.
4. **Security Risks:** The online payment integration and user data management can expose the system to potential security threats.

**Decision**

To mitigate the risks, the project will:

1. Clearly define and manage the scope.
2. Allocate sufficient resources for each project phase.
3. Conduct thorough technology assessment and selection.
4. Implement industry-standard security practices.

**Artifact 3: Estimation and Scheduling**

**Estimation**

The project's overall duration is estimated to be 20 weeks. The following time allocations are based on the work breakdown structure (WBS):

1. Requirements Gathering: 2 weeks
2. Design: 3 weeks
3. Development: 10 weeks (5 sprints)
4. Testing: 3 weeks
5. Deployment: 1 week
6. Post-deployment Support: 1 week

**Scheduling**

The project will follow a Gantt chart for scheduling, with each task assigned start and end dates. The chart will be updated regularly to reflect the project's progress and to adjust the schedule if necessary.

**Artifact 4: Stakeholder Analysis, Communications Plan, and Metrics**

**Stakeholder Analysis**

1. **Project Sponsor:** Provides funding and resources for the project.
2. **Customers:** Users of the online bookstore.
3. **Admins:** Manage inventory, customers, and sales data.
4. **Development Team:** Developers, designers, and testers responsible for building the system.

**Communications Plan**

1. **Project Meetings:** Weekly status meetings to discuss progress, issues, and risks.
2. **Sprint Reviews:** At the end of each sprint, a review will be held to demonstrate the completed work and gather feedback.
3. **Email Updates:** Regular email updates to keep stakeholders informed about project progress.
4. **Issue Tracking System:** A system to log and track project issues and resolutions.

**Metrics**

1. **Schedule Performance Index (SPI):** Measures the project's progress against the planned schedule.
2. **Cost Performance Index (CPI):** Measures the project's cost efficiency.
3. **Defect Density:** Measures the number of defects per size of the project.
4. **Customer Satisfaction:** Measures the satisfaction of customers using the online bookstore.

By following the above plan and implementing the identified risk mitigation strategies, the Online Bookstore project can be executed successfully and achieve its objectives.