Functional requirements for an Online Project Management system may include:

1. User Registration and Authentication:

- Users should be able to create an account and provide necessary information.

- The system should authenticate users and ensure secure access to their accounts.

2. Project Creation and Management:

- Users should be able to create new projects and provide project details.

- The system should allow users to define project milestones, tasks, deadlines, and assign responsible team members.

- Users should be able to track the progress of projects and tasks.

3. Task Management:

- Users should be able to create and assign tasks to team members.

- Tasks should have details such as description, priority, due date, and status.

- Users should be able to update task status, mark tasks as complete, and track task progress.

4. Team Collaboration:

- The system should facilitate team communication and collaboration.

- Users should be able to share project-related documents, files, and updates with team members.

- Users should be able to discuss project-related topics through comments or chat features.

5. Document Management:

- Users should be able to upload, store, and manage project-related documents.

- The system should provide version control and document sharing capabilities.

6. Scheduling and Calendar Integration:

- The system should provide a calendar or scheduling feature to manage project timelines, milestones, and deadlines.

- Users should be able to view and update their project-related activities and schedules.

7. Reporting and Analytics:

- The system should generate reports on project progress, task completion, and team performance.

- Users should be able to view analytics and visualize project data through charts or graphs.

8. Notifications and Reminders:

- The system should send notifications and reminders to users for upcoming deadlines, assigned tasks, or important updates.

9. Integration with Third-Party Tools:

- The system should have the capability to integrate with other tools such as messaging platforms, document management systems, or issue tracking systems.

10. Access Control and Permissions:

- The system should enforce role-based access control, allowing administrators to define user roles and permissions.

- Users should have appropriate access levels based on their roles.

These are just some examples of functional requirements for an Online Project Management system. The specific requirements may vary based on the project's scope, target users, and unique needs.

Non-functional requirements for an Online Project Management system may include:

1. Usability:

- The system should have a user-friendly interface and intuitive navigation.

- It should provide clear and concise instructions to users.

- The system should be accessible across different devices and screen sizes.

2. Performance:

- The system should have fast response times, allowing users to perform actions without significant delays.

- It should handle a large number of concurrent users and maintain system performance.

- The system should be scalable to accommodate increasing user load or project complexity.

3. Reliability:

- The system should be available and accessible to users with minimal downtime.

- It should have backup and disaster recovery mechanisms to ensure data integrity and continuity.

- The system should handle errors gracefully and provide meaningful error messages to users.

4. Security:

- The system should ensure the confidentiality and integrity of user data.

- It should implement appropriate authentication and authorization mechanisms to protect user accounts and sensitive information.

- The system should use encryption techniques to secure data transmission over the network.

5. Compatibility:

- The system should be compatible with commonly used web browsers and operating systems.

- It should support integration with other systems or tools, following industry-standard protocols or APIs.

6. Scalability:

- The system should be able to handle an increasing number of projects, tasks, and users without significant performance degradation.

- It should support the addition of new features or modules without compromising system performance.

7. Maintainability:

- The system should have a modular and well-documented architecture to facilitate future enhancements and maintenance.

- It should allow for easy troubleshooting and debugging of issues.

- The system should support efficient software updates and version control.

8. Data Backup and Recovery:

- The system should regularly back up user data to prevent data loss in case of system failures or disasters.

- It should have mechanisms in place to restore data from backups if necessary.

9. Compliance:

- The system should comply with relevant data protection regulations and privacy laws.

- It should adhere to industry best practices and security standards.

10. Performance Monitoring and Logging:

- The system should have logging mechanisms to capture important system events, errors, and user activities for monitoring and auditing purposes.

- It should provide administrators with tools to monitor system performance and generate performance reports.

These non-functional requirements are essential to ensure the overall effectiveness, usability, security, and performance of an Online Project Management system. The specific non-functional requirements may vary depending on the project's context, organizational policies, and user expectations.

A suitable business entity for an Online Project Management system could be a Software as a Service (SaaS) company. This type of business entity is well-suited for delivering software applications over the internet to customers on a subscription basis. Here are some key characteristics of a SaaS company:

1. Legal Structure: The business entity can be structured as a corporation or a limited liability company (LLC) to provide liability protection for the owners.

2. Subscription Model: The company offers the Online Project Management system as a service, where customers pay a recurring subscription fee to access and use the software.

3. Cloud Infrastructure: The company leverages cloud computing technologies to host and deliver the Online Project Management system to customers over the internet.

4. Multi-Tenancy: The software architecture allows multiple customers to use the system simultaneously while keeping their data and configurations separate and secure.

5. Scalability: The business entity is designed to scale its infrastructure and resources to handle an increasing number of customers and their project management needs.

6. Customer Support: The company provides customer support, including technical assistance, troubleshooting, and updates to ensure a smooth user experience.

7. Data Security and Privacy: The business entity prioritizes data security and implements measures to protect customer data, including encryption, access controls, and compliance with relevant privacy regulations.

8. Pricing and Billing: The company establishes pricing plans based on different features and levels of service, billing customers on a recurring basis for their subscription.

9. Marketing and Sales: The business entity focuses on marketing efforts to attract customers, leveraging digital marketing strategies, content creation, and customer testimonials. Sales activities may include online demos, trials, and personalized consultations.

10. Partnerships and Integrations: The company may establish partnerships with other software providers or service providers to enhance the functionality of the Online Project Management system or integrate with complementary tools.

It is important to consult with legal and business professionals to determine the most appropriate business entity structure based on your specific circumstances, local regulations, and long-term goals for the Online Project Management system.

+-----------+ +-------------+ +--------+

| User | | Project | | Task |

+-----------+ +-------------+ +--------+

| user\_id |1 \*| project\_id |1 \*|task\_id |

| name |---------| name |---------| name |

| email | | description | | status |

| password | | start\_date | | ... |

+-----------+ | end\_date | +--------+

+-------------+

|1

|

|

1 |\*

+----+----+

| Team |

+---------+

| team\_id |

| name |

+---------+

|1

|

|

1 |\*

+----+----+

| Document|

+---------+

| doc\_id |

| name |

| file |

In an Online Project Management system, the following database tables could be considered:

1. User:

- user\_id (Primary Key)

- name

- email

- password

2. Project:

- project\_id (Primary Key)

- name

- description

- start\_date

- end\_date

3. Task:

- task\_id (Primary Key)

- project\_id (Foreign Key referencing Project)

- name

- description

- start\_date

- end\_date

- status

4. Team:

- team\_id (Primary Key)

- project\_id (Foreign Key referencing Project)

- name

5. User\_Task (Associative Table for Many-to-Many relationship between User and Task):

- user\_id (Foreign Key referencing User)

- task\_id (Foreign Key referencing Task)

6. Document:

- document\_id (Primary Key)

- task\_id (Foreign Key referencing Task)

- name

- file\_path

- description