

Non-Functional Requirements

Upwork Proposal Assistant

Non-Functional Requirements

Non-functional requirements describe **how the system performs** rather than what it does. They define the quality, performance, reliability, and usability of the software.

1. Performance Requirements

- The system should generate a proposal within 2–5 seconds after user input.
- The application should handle multiple users simultaneously without performance degradation.
- Page loading time should not exceed 3 seconds under normal network conditions.

2. Usability Requirements

- The system should have a simple and intuitive user interface.
- Users with basic computer knowledge should be able to use the system without training.
- Navigation between different sections (dashboard, proposal generation, history) should be smooth and clear.
- The interface should be responsive and adaptable to different screen sizes.

3. Reliability Requirements

- The system should be available 24/7, except during scheduled maintenance.
- It should handle unexpected failures gracefully without data loss.
- Automatic backup of user data should be performed regularly.

4. Security Requirements

- User data must be protected using secure authentication mechanisms.
- All data transmission should be encrypted using HTTPS.
- Unauthorized access to user data must be prevented.
- User credentials and sensitive information should be securely stored.

5. Scalability Requirements

- The system should be able to handle an increasing number of users without performance issues.
- It should support future expansion, such as adding new features or integrating with more platforms.

6. Maintainability Requirements

- The system should be modular, making it easy to update or modify individual components.
- Clear documentation should be maintained for future developers.
- Bugs and updates should be fixable without affecting the entire system.

7. Compatibility Requirements

- The system should be compatible with major web browsers (Chrome, Firefox, Edge).
- It should run on multiple operating systems such as Windows, macOS, and Linux.

8. Availability Requirements

- The system should maintain at least 99% uptime.
- Downtime for maintenance should be minimal and preferably scheduled during off-peak hours.

9. Data Integrity Requirements

- User data should remain accurate and consistent throughout all operations.
- The system must prevent data loss during crashes or unexpected shutdowns.

10. Compliance Requirements

- The system should comply with data protection and privacy standards.
- It should follow ethical guidelines regarding user data usage.

1 External Interface of the Upwork Proposal Assistant

The external interface defines how the Upwork Proposal Assistant interacts with users, hardware, software systems, and communication networks. It ensures smooth interaction between the system and its external environment, enabling users to efficiently generate professional proposals.

1.1 1. User Interface (UI)

The user interface is the main point of interaction between the freelancer and the system. It must be simple, intuitive, and user-friendly to allow easy navigation.

Key Features of the User Interface:

- Login and registration screen for freelancers
- Dashboard displaying:
 - User profile details
 - Past proposals
 - Client analysis summary
- Form to input job details or paste the job description
- Option to view client profile analysis (budget, job history, ratings, etc.)
- Template selection interface
- Editable proposal editor
- Preview and download option for the final proposal

The UI should be responsive and accessible on desktops, laptops, and tablets.

1.2 2. Hardware Interface

The system does not require specialized hardware and can operate on standard computing devices.

Supported Hardware:

- Desktop computers
- Laptops
- Tablets

Input Devices:

- Keyboard
- Mouse / Touchpad

Output Devices:

- Monitor / Screen

The system will run through a web browser, making it accessible on most modern devices.

1.3 3. Software Interface

The software interacts with several internal and external software components:

Internal Software Interfaces

- Database system to store:
 - User profiles
 - Proposal templates
 - Client analysis data
- Backend services for:
 - Proposal generation
 - User authentication
 - Data processing

External Software Interfaces

- Web browsers (Chrome, Firefox, Edge)
- APIs for:
 - Fetching client/job data (if applicable)
 - AI-based text generation

These interfaces ensure smooth communication between system modules.