Software Requirements Specification (SRS)

Upwork Proposal Assistant

Contents

1 Introduction

This section describes the purpose and scope of the Software Requirements Specification (SRS) to help stakeholders understand the system.

1.1 Purpose

This SRS document defines the Functional Requirements (FR) and Non-Functional Requirements (NFR) of the system. It acts as a formal reference between the development team and the Requirement Provider (RP) and provides a basis for system design, implementation, and validation.

1.2 Scope

The Upwork Proposal Assistant analyzes client profiles from Upwork such as job success rate, reviews, budget history, and location. Based on this analysis, it generates proposal templates using past successful submissions and provides a client summary to help freelancers decide whether to apply. The system reduces proposal writing time and improves decision-making.

1.3 Definitions and Abbreviations

- RP: Requirement Provider
- SRS: Software Requirements Specification
- FR: Functional Requirement
- NFR: Non-Functional Requirement
- UI: User Interface
- JSR: Job Success Rate

All undefined terms follow IEEE Std 729-1983.

2 Overall Description

2.1 Product Perspective

The system is a standalone browser extension designed to reduce manual effort in writing Upwork proposals by analyzing client history before proposal generation.

2.2 Product Functions

- Client profile analysis
- Client reliability assessment
- Personalized proposal generation
- Proposal editing and customization
- Proposal history and analytics

2.3 User Characteristics

- Freelancers: Basic web skills, frequent users
- Administrators: Manage templates and users
- Developers: Maintain and update the system

All users have basic browser proficiency.

2.4 General Constraints

- Compatible with Chrome, Firefox, and Edge
- No direct Upwork API integration
- Ethical and privacy-compliant data usage

2.5 Assumptions and Dependencies

- Freelancers provide accurate client data
- RP provides scoring rules
- Users have active Upwork accounts
- Past proposal data is available

3 Functional Requirements

3.1 FR-001 Client Profile Analysis

The system shall analyze client data and generate a reliability score and application recommendation.

3.2 FR-002 Proposal Template Generation

The system shall generate personalized and editable proposal drafts based on client requirements and past successful proposals.

3.3 FR-003 Freelancer Decision Support

The system shall provide recommendations such as Strong Apply, Apply with Caution, or Skip.

3.4 FR-004 Template Management

The system shall store, update, and rank proposal templates based on performance.

4 Non-Functional Requirements

4.1 Performance Requirements

- The system shall load the main interface within 3 seconds under normal network conditions.
- Client profile analysis and proposal generation shall complete within 5 seconds.
- The system shall support multiple concurrent users without performance degradation.
- External requests shall be handled asynchronously.

4.2 Reliability and Availability

- The system shall maintain at least 99% uptime per month.
- The system shall handle failures gracefully.
- User data shall not be lost during unexpected shutdowns.

4.3 Usability Requirements

- The system shall provide a simple and intuitive user interface.
- User input shall be minimized where possible.
- Error messages shall be clear and informative.

4.4 Security Requirements

- All communication shall use HTTPS with TLS encryption.
- User data shall be stored securely with restricted access.
- Unauthorized access shall be prevented.

4.5 Scalability Requirements

- The system shall support increasing numbers of users.
- Future freelance platform integration shall be possible.

4.6 Maintainability and Modularity

- The system shall follow a modular architecture.
- Code shall be well-documented.
- Updates shall not disrupt existing functionality.

4.7 Data Backup and Recovery

- User data shall be backed up every 24 hours.
- Data recovery shall be supported in case of failure.

4.8 Compatibility and Portability

- The system shall work on modern browsers and operating systems.
- The browser extension shall not interfere with normal platform usage.

4.9 Legal and Ethical Constraints

- The system shall comply with third-party platform policies.
- The system shall prevent unethical usage.
- Final proposal submission responsibility remains with the freelancer.

5 External Interface Requirements

5.1 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.

5.2 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

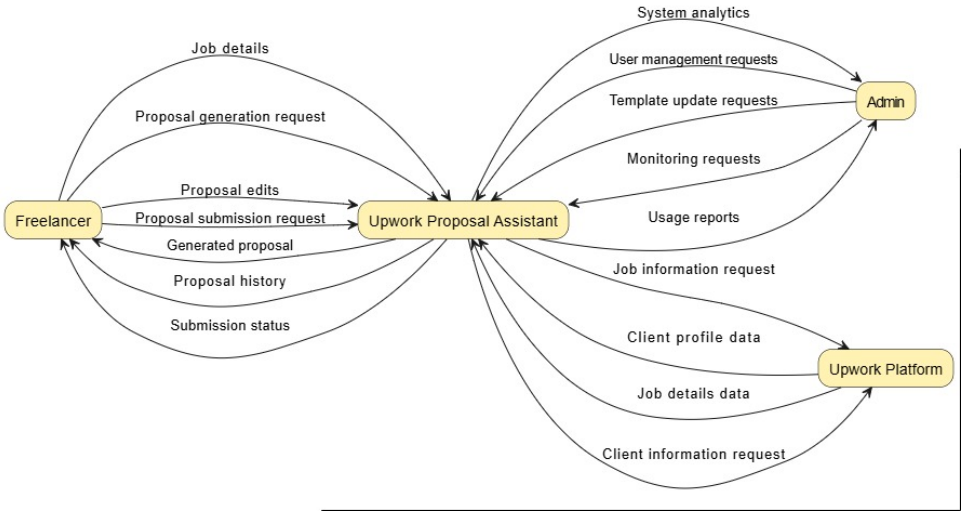
External Software Interfaces:

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

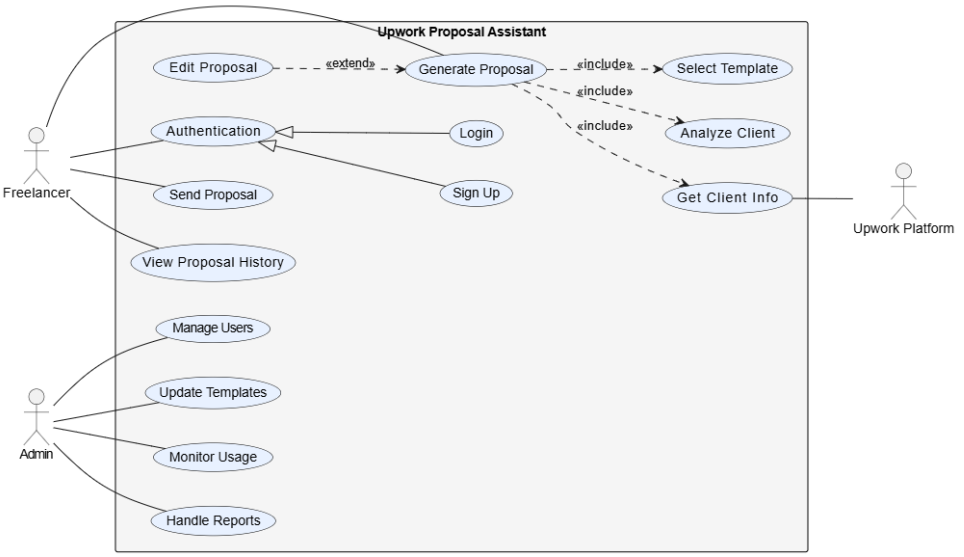
These interfaces ensure smooth communication between system modules.

6 System Diagrams

6.1 Context Diagram



6.2 Use Case Diagram



7 References

- IEEE Std 830-1998, Software Requirements Specification
- ISO/IEC/IEEE 29148:2018, Requirements Engineering
- Upwork Proposal Writing Guidelines
- IEEE Std 729-1983, Software Engineering Glossary