# Software Requirements Specification

for

<Project>

Version 1.0 approved

Prepared by <author>

<organization>

<date created>

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# **Revision History**

Name	Date	Reason For Changes	Version

## 1. Introduction

#### 1.1

#### 1.2 Purpose

<Identify the product whose software requirements are specified in this document, including the revision or release number. Describe the scope of the product that is covered by this SRS, particularly if this SRS describes only part of the system or a single subsystem.>

#### 1.3 Document Conventions

<Describe any standards or typographical conventions that were followed when writing this SRS, such as fonts or highlighting that have special significance. For example, state whether priorities for higher-level requirements are assumed to be inherited by detailed requirements, or whether every requirement statement is to have its own priority.>

## 1.4 Intended Audience and Reading Suggestions

<Describe the different types of reader that the document is intended for, such as developers, project managers, marketing staff, users, testers, and documentation writers. Describe what the rest of this SRS contains and how it is organized. Suggest a sequence for reading the document, beginning with the overview sections and proceeding through the sections that are most pertinent to each reader type.>

## 1.5 Product Scope

<Provide a short description of the software being specified and its purpose, including relevant benefits, objectives, and goals. Relate the software to corporate goals or business strategies. If a separate vision and scope document is available, refer to it rather than duplicating its contents here.>

#### 1.6 References

<List any other documents or Web addresses to which this SRS refers. These may include user interface style guides, contracts, standards, system requirements specifications, use case documents, or a vision and scope document. Provide enough information so that the reader could access a copy of each reference, including title, author, version number, date, and source or location.>

## 2. Overall Description

## 2.1 Product Perspective

<Describe the context and origin of the product being specified in this SRS. For example, state whether this product is a follow-on member of a product family, a replacement for certain existing systems, or a new, self-contained product. If the SRS defines a component of a larger system, relate the requirements of the larger system to the functionality of this software and identify interfaces between the two. A simple diagram that shows the major components of the overall system, subsystem interconnections, and external interfaces can be helpful.>

#### 2.2 Product Functions

<Summarize the major functions the product must perform or must let the user perform. Details will be provided in Section 3, so only a high level summary (such as a bullet list) is needed here. Organize the functions to make them understandable to any reader of the SRS. A picture of the major groups of related requirements and how they relate, such as a top level data flow diagram or object class diagram, is often effective.>

#### 2.3 User Classes and Characteristics

<Identify the various user classes that you anticipate will use this product. User classes may be differentiated based on frequency of use, subset of product functions used, technical expertise, security or privilege levels, educational level, or experience. Describe the pertinent characteristics of each user class. Certain requirements may pertain only to certain user classes. Distinguish the most important user classes for this product from those who are less important to satisfy.>

## 2.4 Operating Environment

<Describe the environment in which the software will operate, including the hardware platform, operating system and versions, and any other software components or applications with which it must peacefully coexist.>

## 2.5 Design and Implementation Constraints

<Describe any items or issues that will limit the options available to the developers. These might include: corporate or regulatory policies; hardware limitations (timing requirements, memory requirements); interfaces to other applications; specific technologies, tools, and databases to be used; parallel operations; language requirements; communications protocols; security considerations; design conventions or programming standards (for example, if the customer's organization will be responsible for maintaining the delivered software).>

#### 2.6 User Documentation

<List the user documentation components (such as user manuals, on-line help, and tutorials) that will be delivered along with the software. Identify any known user documentation delivery formats or standards.>

## 2.7 Assumptions and Dependencies

<List any assumed factors (as opposed to known facts) that could affect the requirements stated in the SRS. These could include third-party or commercial components that you plan to use, issues around the development or operating environment, or constraints. The project could be affected if these assumptions are incorrect, are not shared, or change. Also identify any dependencies the project has on external factors, such as software components that you intend to reuse from another project, unless they are already documented elsewhere (for example, in the vision and scope document or the project plan).>

## 3. External Interface Requirements

#### 3.1 User Interfaces

<Describe the logical characteristics of each interface between the software product and the users. This may include sample screen images, any GUI standards or product family style guides that are to be followed, screen layout constraints, standard buttons and functions (e.g., help) that will appear on every screen, keyboard shortcuts, error message display standards, and so on. Define the software components for which a user interface is needed. Details of the user interface design should be documented in a separate user interface specification.>

#### 3.2 Hardware Interfaces

<Describe the logical and physical characteristics of each interface between the software product and the hardware components of the system. This may include the supported device types, the nature of the data and control interactions between the software and the hardware, and communication protocols to be used.>

#### 3.3 Software Interfaces

<Describe the connections between this product and other specific software components (name and version), including databases, operating systems, tools, libraries, and integrated commercial components. Identify the data items or messages coming into the system and going out and describe the purpose of each. Describe the services needed and the nature of communications. Refer to documents that describe detailed application programming interface protocols. Identify data that will be shared across software components. If the data sharing mechanism must be implemented in a specific way (for example, use of a global data area in a multitasking operating system), specify this as an implementation constraint.>

#### 3.4 Communications Interfaces

<Describe the requirements associated with any communications functions required by this product, including e-mail, web browser, network server communications protocols, electronic forms, and so on. Define any pertinent message formatting. Identify any communication standards that will be used, such as FTP or HTTP. Specify any communication security or encryption issues, data transfer rates, and synchronization mechanisms.>

## 4. System Features

<This template illustrates organizing the functional requirements for the product by system features, the major services provided by the product. You may prefer to organize this section by use case, mode of operation, user class, object class, functional hierarchy, or combinations of these, whatever makes the most logical sense for your product.>

## 4.1 System Feature 1

<Don't really say "System Feature 1." State the feature name in just a few words.>

- 4.1.1 Description and Priority
- <Provide a short description of the feature and indicate whether it is of High, Medium, or Low priority. You could also include specific priority component ratings, such as benefit, penalty, cost, and risk (each rated on a relative scale from a low of 1 to a high of 9).>
- 4.1.2 Stimulus/Response Sequences
- <List the sequences of user actions and system responses that stimulate the behavior defined for this feature. These will correspond to the dialog elements associated with use cases.>
- 4.1.3 Functional Requirements
- <Itemize the detailed functional requirements associated with this feature. These are the software capabilities that must be present in order for the user to carry out the services provided by the feature, or to execute the use case. Include how the product should respond to anticipated error conditions or invalid inputs. Requirements should be concise, complete, unambiguous, verifiable, and necessary. Use "TBD" as a placeholder to indicate when necessary information is not yet available.>
- <Each requirement should be uniquely identified with a sequence number or a meaningful tag of some kind.>

REQ-1:

REQ-2:

#### 4.2 System Feature 2 (and so on)

#### 4.3 Home Page

#### 4.1.1 Description and Priority

**Description:** The home page provides the initial interface for academic applicants, enabling them to log in, register as a new user, and access help documentation. It display links to User Guide Walkthrough video. The page also displays institutional branding and informational content.

**Priority:** High

**Priority Component Ratings:** 

- Benefit: 9 Essential for system navigation and accessibility.
- **Penalty:** 8 Without a functional home page, users cannot access the platform's features.
- Cost: 5 Development involves static and dynamic content with responsive design.
- Risk: 6 Improper layout or accessibility issues could hinder user experience.

#### 4.1.2 Stimulus/Response Sequences

Stimulus: An applicant visits the system's URL.

**Response:** The system loads the home page, displaying:

Login form with fields for email/national ID and confirmation code.

A "New User" (مستخدم جدید) button.

Link User Guide Walkthrough video.

Stimulus: The applicant clicks the "New User" button.

**Response:** The system redirects the applicant to the registration page.

Stimulus: The applicant clicks on the "User Guide" (دليل المستخدم) link.

**Response:** The system opens the user quide in a new tab or modal window.

**Stimulus:** The applicant interacts with the chatbot/help icon at the bottom of the page.

**Response:** The chatbot initiates a conversation to provide support or guidance.

**Stimulus:** The applicant submits invalid login credentials.

Response: The system displays an error message and prompts the user to re-enter their

credentials.

#### 4.1.3 Functional Requirements

REQ-1: The system shall display a login form with fields for email/national ID and a confirmation code.

REQ-2: The system shall provide a "New User" button that redirects to the registration page.

REQ-3: The system shall display a link to a user guide (دليل المستخدم) and provide an instructional video link for user assistance.

REQ-4: The system shall include a chatbot/help icon at the bottom of the page for live support or FAQs.

REQ-5: The system shall validate login credentials upon form submission and display an error message for invalid inputs.

REQ-6: The system shall display institutional branding, including logos and system descriptions, prominently on the home page.

REQ-7: The system shall display announcements or system messages, such as recent updates, at the bottom or side of the page.

#### 4.4 User Authentication System for Academics (Applicant)

#### 4.1.1 Description and Priority

The User Authentication System allows users to securely log in to the platform using their email address or national ID, along with a confirmation code. This ensures secure access to the system's services.

#### **Priority:** High

#### Priority Component Ratings:

- Benefit: 9 Ensures secure and authorized access to sensitive information.
- Penalty: 8 Failure to implement secure authentication may compromise the platform's data and user trust.
- Cost: 6 Moderate development and integration costs.
- Risk: 7 Potential vulnerabilities in user authentication could pose security threats if not implemented correctly.

#### 4.1.2 Stimulus/Response Sequences

**Stimulus:** The applicant enters their email/national ID and confirmation code, then clicks the "Login" button.

#### Response:

- If credentials are valid, the system grants access and redirects the applicant to their dashboard, where they can initiate new applications or view existing ones.
- If credentials are invalid, the system displays an error message: "Invalid credentials. Please check your email/ID or confirmation code."

Stimulus: The applicant clicks the "Forgot Confirmation Code" link.

**Response:** The system sends a new confirmation code to the applicant's registered email or phone number.

**Stimulus:** The applicant encounters multiple failed login attempts.

**Response:** The system temporarily locks the account after five failed attempts and sends an alert email with instructions to unlock the account.

Stimulus: The applicant clicks register as new user button

Response: The system redirects the user to the registration page

#### add change password

#### 4.1.3 Functional Requirements

REQ-1: The system shall allow academic applicants to log in using their email address or national ID and a confirmation code.

- REQ-1: The system shall validate the applicant's login credentials (email/national ID and confirmation code) before granting access.
- REQ-2: The system shall display an error message when invalid credentials are entered, providing guidance on how to retry or reset.
- REQ-3: The system shall provide a "Forgot Confirmation Code" feature for applicants, which sends a new code to the registered email or phone number.

#### FR or NFR?

- REQ-4: The system shall ensure secure communication for login operations by using HTTPS protocols and encrypting sensitive data.
- REQ-5: The system shall lock the applicant's account temporarily after five consecutive failed login attempts and notify the user via email.
- REQ-6: The system shall support session timeouts, automatically logging out the applicant after a predefined period of inactivity (TBD exact timeout duration).
- REQ-7: The system shall maintain logs of all login attempts, specifying the date, time, and outcome of each attempt for security auditing purposes.
- REQ-8: The system shall allow applicants to register for new accounts through the "New User" button, redirecting them to the registration page.

## **4.5** User Registration for Academics (Applicant)

#### 4.1.1 Description and Priority

**Description:** The User Registration feature allows academic applicants to create an account on the system by providing their full name, email, nationality, phone number, and national ID. This feature ensures only authorized users can access the platform's services, such as applying for impact factor and plagiarism reports.

#### **Priority:** High

## **Priority Component Ratings:**

- **Benefit:** 9 Enables secure account creation, which is essential for system use.
- **Penalty:** 8 Without registration, applicants cannot access key features, resulting in system inaccessibility.
- Cost: 5 Development involves form validation, data handling, and secure account setup.
- **Risk:** 7 Potential issues with incorrect data entry or validation might compromise the user experience.

#### 4.1.2 Stimulus/Response Sequences

**Stimulus:** The applicant fills out the registration form with the following fields:

- Full Name (validated for proper Arabic name entry).
- o Email Address (validated for format and uniqueness).
- Nationality (dropdown selection).
- Phone Number (validated for format).
- National ID (validated for numeric input and length).
- o Confirmation fields for email, phone number, and national ID.

**Response:** The system validates all fields as the user enters data and .

**Stimulus:** The applicant clicks the "Save" button after completing the form.

#### Response:

- If all fields are valid, the system creates a new user account and sends a confirmation email or SMS.
- If there are invalid fields, the system highlights errors with explanatory messages.

**Stimulus:** The applicant receives the confirmation email/SMS and completes any required verification steps (e.g., OTP or email verification link).

**Response:** The system activates the account and allows or redirects the applicant to log in.

**Stimulus:** The applicant input registration data for an existing user.

**Response:** The system outputs message saying that this user already exists and provide login link suggesting login instead.

#### 4.1.3 Functional Requirements

REQ-1: The system shall include the following fields in the registration form:

- Full Name (validated for proper Arabic formatting).
- Email Address (validated for uniqueness and format).
- Nationality (dropdown list).
- Phone Number (validated for format and country code).
- National ID (validated for numeric input and length).

REQ-2: The system shall validate all inputs and display error messages for:

- Missing required fields.
- Incorrect input formats (e.g., invalid email, improperly formatted name).
- Duplicate email or national ID.

REQ-3: The system shall save the applicant's data only if all inputs are valid.

REQ-4: The system shall send a confirmation email or SMS upon successful registration, with instructions for completing account activation.

REQ-5: The system shall support Arabic and English for input validation messages, based on user preferences.

REQ-6: The system shall allow applicants to update their information during the registration process before saving the form.

REQ-7: The system should prevent creating user with same data as existing user and suggest logging in instead or using different data

REQ-7: The system shall lock incomplete registration attempts after 24 hours, requiring the user to restart the process (TBD exact timeout duration).

#### 4.6 User Guide

#### 4.6.1 Description and Priority

**Description:** The User Guide feature provides a comprehensive, step-by-step guide to assist applicants in understanding the necessary steps to create an application for promotion. This feature ensures applicants can navigate the platform efficiently and avoid common errors during the application process. The user for this feature will be anyone trying to understand how the website works (academic person)

**Priority:** medium

#### **Priority Component Ratings:**

- **Benefit:** 9 (Improves user experience and reduces errors)
- **Penalty:** 8 (Without it, users may face confusion, leading to delays and dissatisfaction)
- Cost: 5 (Effort required for designing and maintaining the guide)
- **Risk:** 3 (Low risk of implementation failure)

#### 4.6.2 Stimulus/Response Sequences

**Stimulus:** The user navigates to the "User Guide" section from the main menu.

**Response:** The system displays the User Guide homepage, categorized into different stages of the application process.

Stimulus: The user selects a category, such as "Impact Factor Report" or "Plagiarism Report."

**Response:** The system provides detailed instructions for the selected category, including text explanations, screenshots, and FAQs.

**Stimulus:** The user searches for specific keywords in the User Guide search bar (e.g., "upload documents").

**Response:** The system retrieves and displays relevant sections of the guide related to the keyword.

#### 4.6.3 Functional Requirements

REQ-1: The system shall provide a User Guide accessible from the main menu.

REQ-2: The User Guide shall include categorized sections for "Impact Factor Report," "Plagiarism Report," and "Application Submission Process."

REQ-3: The User Guide shall incorporate multimedia elements (e.g., screenshots, flowcharts, or videos) to enhance understanding.

REQ-4: The system shall provide a "AI assist chatbot to help users having problems using the platform

**REQ-5:** The system shall allow periodic updates to the User Guide content by authorized personnel to ensure accuracy and relevance.

## 4.7 Research Document Upload and Metadata Submission

#### 4.7.1 Description and Priority

This feature allows applicants to upload their researches along with "خطاب العميد" and "خطاب المختومة والمعتمدة Applicants also provide metadata for each research, including journal/conference details, ISSN, DOI, and the upload the research. The system ensures smooth submission by notifying applicants of the required documents. Additionally, applicants must provide metadata for 5 to 8 research items in the list.

**Priority:** High

#### **Priority Component Ratings:**

- **Benefit:** 8 (It ensures a complete and organized application process)
- Penalty: 6 (Delays or incomplete submissions may impact the review process)
- Cost: 4 (Moderate cost, focused mainly on handling document uploads)
- **Risk:** 5 (There is a risk of delays if incorrect formats or missing metadata occur, but these can be handled)

#### 4.1.2 Stimulus/Response Sequences

Stimulus: The applicant uploads the required documents,"عطاب العميد and "خطاب العميد" and الأبحاث المختومة and "و المعتمد

#### **Response:**

- The system validates that the uploaded files are in PDF format.
- The system stores the files securely.

Stimulus: The applicant clicks on a specific research field (e.g., "1 بيانات بحث رقم "1") to upload additional research details.

**Response:** The system displays a form to enter metadata for the research document, including:

- مجلة 🔳
- عنو ان البحث

- لغة المجلة
- عنوان المجلة
- ISSN-Print / ISSN-Online
- حالة النشر
- تاريخ النشر
- DOI
- (*PDF)* تحميل البحث

The system ensures all metadata fields are completed before allowing the user to proceed.

#### Stimulus:

The applicant checks the declaration checkbox, which is accompanied by the message: "أنعهد أن كافة البيانات المذكورة وملفات المرفقة صحيحة وعلى مسؤولية المتقدم".

**Response:**The system enables the "تأكيد" button, allowing the applicant to proceed with the submission or save the progress.

Stimulus: The applicant clicks on the "تأكيد" button to submit the documents.

**Response:**The system submits the application and displays a confirmation message and navigates to the "طلباتي" page .(update status )

#### Stimulus:

The applicant clicks on the "حفظ هذه الصفحة كمسودة" button to save the progress.

**Response:** The system saves the applicant's current progress as a draft, allowing the applicant to return and complete the submission later. (return lel talbaty)

#### 4.1.3 Functional Requirements

REQ-1:The system shall display message"يجب عدم تحميل أي ملفات تم تنزيلها من ResearchGate. يجب عدم تحميل أي ملفات تم تنزيلها من (warning message)

REQ-2: The system shall allow applicants to upload "خطاب العميد" and "أبحاث المختومة" and خطاب العميد" والمعتمدة

**REQ-3:**The system shall provide a form for each research entry to capture metadata including:

- المجلة
- عنوان البحث
- لغة المجلة
- عنوان المجلة
- ISSN-Print
- ISSN-Online
- حالة النشر
- تواريخ النشر
- DOI
- تحميل البحث (PDF)

REQ-4:The system shall allow only PDF files to be uploaded for each research entry. If the applicant uploads a file in any other format (e.g., DOCX, JPG), the system shall display an error message: "Please upload the file in PDF format."

REQ-5:The system shall validate that all metadata fields for each research entry are completed before proceeding

REQ-6: The system shall display a declaration checkbox with the following message: "أتعهد أن كافة البيانات المذكورة وملفات المرفقة صحيحة وعلى مسؤولية المتقدم"

The system shall ensure that the checkbox is checked before proceeding. If the checkbox is not checked, an error message shall be displayed prompting the user to accept the declaration.

REQ-7: The system shall provide two buttons for final actions:

- o تأكيد (Submit): Submits the application with all documents and metadata.
- o حفظ هذه الصفحة كمسودة (Save as Draft): Saves the current progress as a draft for future editing.

REQ-8:After submission (by clicking تأكيد), the system shall display a confirmation message:(response) //(mail )

REQ-9: the system shall display a message"The report will be processed within 21 working days from receiving the journal list (excluding Friday and Saturday)."

REQ-10:If the file upload exceeds the maximum file size limit (TBD), the system shall reject the file and display an error message.(NFR)

REQ-11:The system shall ensure that the research metadata fields (e.g., journal name, ISSN, DOI) follow proper format validation rules. if not display an inline error message indicating what needs to be corrected. (response)

REQ-12:The system shall automatically pre-fill some metadata fields (such as journal, DOI, ISSN) for subsequent research items when the applicant fills out the metadata for one research item.

REQ-13:Before allowing submission, the system shall ensure that at least 5 research metadata entries are filled out. If fewer than 5 entries are provided, the system shall display an error message: "Please ensure that at least 5 research items are filled out before submitting." (response)

REQ-14:The system shall provide clear tooltips or help text next to fields where necessary to explain the expected input format (e.g., for ISSN: "e.g., 1234-5678"). (NFR)

REQ-15: The system shall make sure the form layout is clean, with enough spacing between fields and sections. (NFR)

#### 4.8 Personal Account Management for Academics:

#### 4.8.1 Description and Priority:

The Personal Account Management feature allows users to input their account information, including university selection, faculty, and major details in both English and Arabic. The feature displays warnings to notify users about any mandatory fields or errors during the update process. This feature has a High Priority as it is critical for maintaining accurate and up-to-date user data.(needed to complete the process)

**Priority:** High

#### **Priority Component Ratings:**

• Benefit: 9/9 • Penalty: 8/9 • Cost: 3/9 • Risk: 4/9

#### 4.8.2 Stimulus/Response Sequences:

- 1. **Stimulus:** User clicks the "personal account" button in their account settings. **Response:** The system displays editable fields for university selection, faculty, and major details.
- 2. **Stimulus:** Applicant selects the type of university (international, governmental, private university, foreign university, or university of technology). **Response:** The system displays a list of university types for selection.
- 3. **Stimulus:** Applicant selects their university name from the list. **Response:** The system displays all university names based on the selected type.
- 4. **Stimulus:** Applicant inputs their faculty (e.g., engineering, medical, CS, etc.).
  - **Response:** The system allows the applicant to enter the faculty name.
- 5. **Stimulus:** Applicant inputs their major details in both English and Arabic. **Response:** The system provides fields for inputting the general and specific majors in both languages.
- 6. **Stimulus:** Applicant clicks the "Save" button after entering their information. **Response:** The system validates the input data and displays a success message if the personal account is created is successful.
- 7. Stimulus: Applicant leaves required fields blank or enters invalid data.

**Response:** The system displays a warning message indicating the error and prevents the user from saving the changes.

8. **Stimulus:** Applicant selects "governmental university" but does not find their institution.

**Response:** The system prompts the applicant to choose the "Ministry of Higher Education & Scientific Research" option and input the institution name manually.

9. **Stimulus:** Applicant does not find their university or faculty in the list.

**Response:** The system displays a warning instructing the applicant to send an email to info.dlu@scu.eg with the faculty name, institution, university details, and a photo of the ministerial decision approving the start of studies.

10. **Stimulus:** Applicant attempts to proceed without completing the personal account setup.

**Response:** The system displays a warning indicating that the personal account must be completed before using the services provided.

11. **Stimulus:** Applicant enters inaccurate or false information.

**Response:** The system displays a warning that the applicant is solely responsible for the accuracy and precision of the information provided.

#### 4.8.3 Functional Requirements

REQ-1: The system shall allow applicants to select the type of university from the following options:

- International
- Governmental
- Private University
- Foreign University
- University of Technology

REQ-2: The system shall display all university types for selection.

REQ-3: The system shall allow applicants to select their university name from a list based on the selected type.

REQ-4: The system shall display all university names for the applicant.

REQ-5: The system shall allow applicants to input their faculty (e.g., engineering, medical, CS, etc.).

REQ-6: The system shall provide input fields for general and specific majors in both English and Arabic.

REQ-7: The system shall validate the input data for required fields and display appropriate warning messages for missing or invalid entries.

REQ-8: The system shall display a "Save" button to submit information to the personal account information.

REQ-9: The system shall display a warning if the applicant selects a governmental university but their institution does not belong to it. The system shall prompt them to select "Ministry of Higher Education & Scientific Research" and input the institution name.

REQ-10: The system shall display a warning instructing applicants who cannot find their university or faculty to send an email to info.dlu@scu.eg with required details and documentation.

REQ-11: The system shall display a confirmation message upon successful input of account information.

REQ-12: The system shall display a warning indicating that the applicant is solely responsible for the accuracy and precision of the information provided.

REQ-13: The system shall display a warning indicating that the personal account must be completed before using the services provided.

## 4.9 Payment requests

## 4.9.1 Description and Priority

The Payment Request System allows users to securely process payments for application fees or related services. It ensures a smooth and reliable transaction experience while maintaining compliance with financial regulations and platform integrity.

#### **Priority:** High

#### **Priority Component Ratings:**

- **Benefit:** 9 Ensures timely and secure payment processing, directly affecting service availability.
- **Penalty:** 9 Failure to process payments correctly may disrupt operations and diminish user trust.
- **Cost:** 7 Moderate to high development and integration costs due to external payment gateway requirements.
- Risk: 8 Potential vulnerabilities in payment processing could result in financial loss or security breaches.

#### 4.9.2 Stimulus/Response Sequences

**Stimulus:** An academic applicant selects "Submit Payment" after completing their application. **Response:** The system displays a payment form with fields for payment amount, currency, name, email, research papers number, Purpose of application, Type of report, National ID number and a "Pay" button.

**Stimulus:** The applicant enters payment details and clicks "Pay Now." **Response:** 

- If payment is successful, the system displays a New request. The application is updated as paid.
- If payment fails, the system displays an error message: "Payment Failed. Please check your payment details or try another method."

**Stimulus:** The applicant clicks the "Print" button.

**Response:** The system displays all payments details, including date, amount, status, and transaction ID.(to be printed)

**Stimulus:** The applicant clicks the "Go back to my requests" button.

**Response:** The system displays all his older requests and the new request with all actions that could be taken with each request.

**Stimulus:** The applicant clicks the "Print payment receipt" button.(in the requests page) **Response:** The system displays all payments details, including date, amount, status, and transaction ID.(to be printed)

## 4.9.3 Functional Requirements

- **REQ-1:** The system shall provide a payment page summarizing the payment details, including all charges and the total amount.
- **REQ-2:** The system shall allow applicants to pay via multiple methods, including credit card, debit card, and bank transfer.
- **REQ-3:** The system shall validate payment details(like card number, expiry year, card holder name and security code)
- REQ-4: The system shall display success or failure messages based on the transaction outcome, including a new request made for successful payments.(and stopping older requests)
- **REQ-5:** The system shall log all payment activities for auditing purposes, including date, time, and transaction outcome.
- **REQ-6**: The system shall automatically update the submit payment button to print payment in the applicant's requests page
- REQ-7: The system shall provide users with a detailed breakdown of additional fees (e.g., taxes, service fees) before confirming the payment. (على المحررات الرسمية على المحررات الرسمية بناء) على طلب وزير المالية وتم اضافة 5 ج لدعم صندوق الشهداء )

 REQ-8: The system shall support multi-currency payments if the platform serves international users.

#### 4.10 New Request Submission For Academics

#### 4.1.1 Description and Priority

- **Description**: This feature allows academics to submit a new request for review. The process includes verifying personal information, registering the new request with specific fields, verifying the submission, and closing old repeated requests.
- **Priority**: High
  - Benefit: 9 This feature is essential for academics to request evaluations efficiently and accurately.
  - Penalty: 8 Without this feature, users cannot submit new requests, resulting in significant delays in academic processes.
  - Cost: 6 Implementation requires multi-step workflows, dropdown menus, validation checks, and status updates.
  - Risk: 5 Failure in the workflow (e.g., incomplete validation or improper request closure) could cause confusion, duplicate entries, or data loss.

#### 4.1.2 Stimulus/Response Sequences

- 1. **Stimulus**: The academic selects "New Request"(اضافه طلب جدید).
  - Response: System displays the user's personal information for review(مراجعة بيانات).
- 2. **Stimulus**: The academic clicks "Correct Information" (البيانات صحيحه) if all data is accurate.
  - o **Response**: System redirects the user to the "Register a New Request" (سبيل طلب) form.
- 3. **Stimulus**: The academic clicks "Outdated Information"(البيانات غير محدثه) if data is outdated.
  - o **Response**: System redirects to the Personal Account Management section (الشخصى).
- 4. **Stimulus:** The academic selects the "Purpose of Proposal" dropdown.
  - Response: The system displays the following options: First-Time Proposal,
     Reproposal, Award, First-Time Proposal Educational with Scientific Excellence,
     Reproposal with Reinforcement
- 5. **Stimulus:** The academic selects the "Required Service" dropdown.
  - o **Response:** The system displays the following options: Assistant Professor, Professor
- 6. **Stimulus:** The academic selects the "Sector" dropdown.
  - **Response:** The system displays a list of expertise areas (e.g., Engineering, Science, etc.).
- 7. **Stimulus:** The academic selects the "Committee" dropdown.
  - Response: The system displays available committees relevant to the selected sector.
- 8. **Stimulus:** The academic selects the "Entity Preparing Citation Inspection Report" dropdown.

- **Response:** The system displays a list of universities (e.g., Cairo University, Alexandria University, etc.).
- 9. **Stimulus:** The academic interacts with the "Acknowledgment Field" to confirm participation in the upcoming rotation.
  - **Response:** The system displays the default value for the next scheduled rotation (e.g., "2022-2025 Cycle").
- 10. **Stimulus:** The academic selects the "Report Type" dropdown.
  - Response: The system displays available report types (e.g., Impact Factor Report, Citation Inspection Report).
- 11. Stimulus: The academic enters the "Number of Researches" field.
  - **Response:** System validates input, ensuring the value is between 5 and 8.
- 12. **Stimulus**: The academic fills out all required fields in the request form and clicks "Save"(حفظ).
  - o **Response**: System validates inputs and redirects to the "Verify Request"(الطلب step.
- 13. **Stimulus**: The academic reviews warnings about closing old repeated requests and clicks "Yes, I agree to open a new request and close old requests"(الطلبات القديمة الطلبات القديمة)
  - **Response**: System displays a confirmation pop-up.
- 14. **Stimulus**: The academic confirms the action by clicking "OK."
  - o **Response**: System adds the new request to the list with a "New Request" (طلب)status and marks old requests as "Closed based on applicant's request" تم اغلاق)
- 15. **Stimulus**: The academic denies the action by clicking "Cancel."
  - o **Response**: System remains on the "Verify Request"(التحقق من الطلب) page for the academic to rereview the warning and the new request is not added yet.
- 16. **Stimulus**: The academic reviews warnings about closing old repeated requests and clicks "I don't agree"(کا اوافق)
  - o **Response**: System redirects to the main requests page(طلباتي) and the new request is not recorded.
- 17. **Stimulus**: The academic clicks on the "Procedures" (إجراءات) button.
  - Response: System provides an option to pay the expenses for the new request.

#### 4.1.3 Functional Requirements

- **REQ-1**: Display the user's personal information, including university, faculty, major, and more, for review during the first step.
- **REQ-2**: Provide options for the academic to either confirm the information or update it by redirecting to the Personal Account Management section.
- REQ-3: Include the following fields in the "Register New Request" form:
  - Purpose of Proposal "الغرض من التقدم" (Dropdown with options: First-Time Proposal "ترقية المرة الاولى", First-Time Proposal "بجائزه, First-Time Proposal "ترقية اعاده تقدم", Reproposal Educational with Scientific Excellence "ترقية للمرة الأولى تميز علمي," Reproposal with Reinforcement ("ترقية اعاده تقدم تعزيزي).

- Required Service (Dropdown with options: Assistant Professor "أستاذ مساعد", Professor "أستاذ").
- Sector (Dropdown with expertise areas).
- o Committee (Dropdown with available committees).
- o Entity Preparing Citation Inspection Report (Dropdown with universities).
- Acknowledgment Field (Displays upcoming rotation).
- o Report Type.
- Number of Researches (Min 5, Max 8).
- **REQ-4**: Validate all required fields for completeness and accuracy before submission.
- **REQ-5**: Show a warning during the "Verify Request" step if similar requests exist with their ids, indicating that old requests will be closed.
- **REQ-6**: Provide two buttons in the verification step "I don't agree" which cancels the new request and "Yes, I agree to open a new request and close old requests" which proceeds to close old requests and creates a new request.
- **REQ-7**: Display a confirmation pop-up after agreeing to proceed.
- REQ-8: Update the requests list on the main page to reflect the new request with a status of
  "New Request" (طلب جدید) and mark old repeated requests as "Closed based on applicant's
  request" (تم اغلاق الطلب بناء على طلب المتقدم).
- REQ-9: Include an option to pay expenses in the "Procedures"(إجراءات) column for each request.
- REQ-10: Handle anticipated errors, such as invalid inputs or unresponsive actions, with appropriate error messages and prompts. //add progress bar

## 5. Other Nonfunctional Requirements

## **5.1** Performance Requirements

<If there are performance requirements for the product under various circumstances, state them here and explain their rationale, to help the developers understand the intent and make suitable design choices. Specify the timing relationships for real time systems. Make such requirements as specific as possible. You may need to state performance requirements for individual functional requirements or features.>

#### 5.1.1 System Responsiveness

The platform must respond to user interactions within 2 seconds

#### 5.1.2 Concurrent User Handling

• The platform must support at least **10000 concurrent users** during peak usage without experiencing noticeable slowdowns or crashes

#### 5.1.3 Real-Time Updates

 Dashboards for applicants must reflect task status changes in real-time with a delay of no more than 500 milliseconds for updates received from the backend.

#### 5.1.4 Autosave Functionality

• For forms requiring extensive user input, data must be autosaved every **10 seconds** without impacting the user's ability to continue editing seamlessly.

## **5.2** Safety Requirements

<Specify those requirements that are concerned with possible loss, damage, or harm that could result from the use of the product. Define any safeguards or actions that must be taken, as well as actions that must be prevented. Refer to any external policies or regulations that state safety issues that affect the product's design or use. Define any safety certifications that must be satisfied.>

#### 5.2.1 Data Backup and Recovery

- The system must implement **automatic daily backups** of all critical data, including user profiles, application statuses, and reports, to prevent loss in the event of system failure
- A disaster recovery mechanism must ensure that the platform can be restored within 1
  hour in the event of major data loss or corruption.

#### 5.2.2 Error Handling and Notification

• The system must detect and log errors or malfunctions (e.g., failed application submission) and notify the appropriate personnel or users within **1 minutes** of detection to prevent delays or potential harm to the workflow.

## **5.3** Security Requirements

<Specify any requirements regarding security or privacy issues surrounding use of the product or protection of the data used or created by the product. Define any user identity authentication requirements. Refer to any external policies or regulations containing security issues that affect the product. Define any security or privacy certifications that must be satisfied.>

#### 5.3.1 Authentication

 All users must authenticate using secure credentials, following the institution's policy (Email or IDnumber and confirmation code, two-factor authentication/OTP)

#### 5.3.2 Authorization

• Role-based access control (RBAC) must ensure users can only perform actions and access data permitted for their roles.

#### 5.3.3 Data Encryption

All data transmitted between the frontend and backend must be encrypted

#### 5.3.4 Secure APIs

 All APIs must be secured with authentication tokens and follow the principle of least privilege.

#### 5.3.5 **Session Security**

 User sessions must time out after 45 minutes of inactivity, requiring re-authentication to continue

#### 5.4 Usability

<Specify any additional quality characteristics for the product that will be important to either the customers or the developers. Some to consider are: adaptability, availability, correctness, flexibility, interoperability, maintainability, portability, reliability, reusability, robustness, testability, and usability. Write these to be specific, quantitative, and verifiable when possible. At the least, clarify the relative preferences for various attributes, such as ease of use over ease of learning.>

The system shall provide a highly intuitive, applicant-focused User Interface (UI) that meets the following usability requirements to ensure ease of use, accessibility, and efficiency for applicants:

#### **5.4.1 Profile Completion with Guided Forms**

- The system shall guide applicants through profile completion using **step-by-step forms** with clear instructions, and inline error messages for mandatory fields.
- Real-time validation of profile inputs shall be provided, such as verifying email format and ensuring required fields are not left blank.

#### **5.4.2 Document Uploads**

- The system shall support a drag-and-drop functionality for document uploads to enhance ease of use.
- Real-time validation shall verify the uploaded files' size, format, and integrity, displaying an error message if the uploaded file does not meet the requirements (e.g., file size exceeding 1GB or unsupported formats)

#### 5.4.3 Application Status Visibility

- The system shall include a progress tracker visible to applicants at all times, showing the status of their application at each stage ("Profile Completed" "Application Submitted" "IF Preparation in Progress" "PR in Progress" "Final Report Sent").
- Notifications shall be provided whenever the status of the application changes, through both the UI and optional email/SMS alerts.

#### 5.5 Business Rules

<List any operating principles about the product, such as which individuals or roles can perform which functions under specific circumstances. These are not functional requirements in themselves, but they may imply certain functional requirements to enforce the rules.>

#### 5.5.1 Applicant Role

• Only registered applicants can complete profiles, upload research documents, and submit applications for Impact Factor (IF) and Plagiarism Reports (PR).

#### 5.5.2 Report Accessibility

• Applicants can only view their finalized reports and cannot modify them.

#### 5.5.3 Application Status

- An application cannot proceed to the next stage unless all required tasks in the current stage are marked as complete.
- The system ensures tasks are completed sequentially as per the defined workflow:("Profile Completed" "Application Submitted" "IF Preparation in Progress" "PR in Progress" "Final Report Sent")

#### 5.5.4 Data Confidentiality

• Applicants' research documents and reports are accessible only to the assigned preparation, and revisers for the respective tasks.

## 6. Other Requirements

<Define any other requirements not covered elsewhere in the SRS. This might include database requirements, internationalization requirements, legal requirements, reuse objectives for the project, and so on. Add any new sections that are pertinent to the project.>

## **Appendix A: Glossary**

<Define all the terms necessary to properly interpret the SRS, including acronyms and abbreviations. You may wish to build a separate glossary that spans multiple projects or the entire organization, and just include terms specific to a single project in each SRS.>

## Appendix B: Analysis Models

<Optionally, include any pertinent analysis models, such as data flow diagrams, class diagrams, state-transition diagrams, or entity-relationship diagrams.>

# **Appendix C: To Be Determined List**

<Collect a numbered list of the TBD (to be determined) references that remain in the SRS so they can be tracked to closure.>