Al-Azhar University
Faculty of Engineering
Computers & Systems Engineering Department

WEB PAGE RANKING

SEO SUGGESTION SEARCH ENGINE PROJECT

(Software Design Report)

Contributors:

55 Abd El-Twab M. Fakhry
56 Abd El-Hameed Hassan
57 Abd El-Khalek Alashker
58 Abdurrahman Khalefa
59 Abdurrahman Gamal
60 Abdurrahman Ramadan

Supervised by:
Dr. Muhammad Atef

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Preface

The purpose of a preface is to persuade your readers that they should read the rest of your written work. Keep it short. Describe your background and credentials. Discuss what inspired the project described in this report. Explain who your target audience is, and tell the reader why this project is important to them.

Abstract

A strong abstract sums up your work in very few sentences: (i) state the problem you are addressing; (ii) say why it's an interesting problem, and which issues are hard to tackle; (iii) give your approach towards solving the problem; (iv) say why and how well your approach solves the problem.

Contents

1 Introduction

Your introduction briefly explains the problem you address, and what you've achieved towards solving the problem. It's an edited and updated version of your context and objectives from your topic outline document.

2 User Stories

2.1 User Login

Table 1: User Story 1

User Story Code	US1
Name	User login
Statement	As a user, I want to login into the system, So that I can search for specific topics.
Priority	HIGH
Direct actors	User
Pre-Conditions	1. The user has internet access. 2. The user has a browser. 3. The user opens the login page in the browser.
Post-Conditions	Application functionalities will be available for a user to use.
Senario	1. The user fills in username and password fields. 2. The user clicks on the login button. 3. The system will validate the username and password. If correct, log in; otherwise, stay on the current login page. 4. The user can search for a specific term or enter a live URL for keyword suggestions. 5. The system logs both correct and wrong login.

2.2 Administrator Login

Table 2: User Story 2

User Story Code	US2
Name	Administrator login
Statement	As an administrator, I want to login into the system, So that I can enter the admin area.
Priority	HIGH
Direct actors	Administrator
Pre-Conditions	1. The administrator has internet access. 2. The administrator has a browser. 3. The administrator opens the Admin login page in the browser.
Post-Conditions	Application functionalities will be available for an administrator to use.
Senario	1. The administrator fills in username and password fields. 2. The administrator clicks on the login button. 3. The system will validate the username and password. If correct, log in; otherwise, stay on the current login page. 4. The administrator can feed the database website URLs and their metadata. 5. The system logs both correct and wrong login.

2.3 Website URLs

Table 3: User Story 3

User Story Code	US3
Name	Website URLs
Statement	As an administrator, I want to feed the database website URLs and their metadata, So that the system can use them to search the user query.
Priority	HIGH
Direct actors	Administrator
Pre-Conditions	1. US2.
Post-Conditions	-
Senario	1. The administrator feeds the database a new row with the website URL and its metadata.

2.4 Search Box

Table 4: User Story 4

User Story Code	US4
Name	Search Box
Statement	As a user, I want a search box, So that I can write down my search query.
Priority	HIGH
Direct actors	User
Pre-Conditions	1. US1.
Post-Conditions	-
Senario	1. The user write down his/her search query in the search box. 2. The user clicks the search button. 3. The system uses this query and matches it with the content provided in URLs fed in the database. 4. The system generates a list of related URLs. 5. The user can then click on any URL in the generated list, and the URL will open the corresponding website. 6. The system increases the number of visits to that URL in the database. 7. The system goes to the web page URL to fetch its metadata and gives points according to page errors. 8. The system updates the page's rank in the database according to the points the page gains and the number of visits.

2.5 SEO Suggestions

Table 5: User Story 5

User Story Code	US5
Name	SEO Suggestions
Statement	As a user, I want to search a live URL, So that I can get suitable keywords and meta descriptions.
Priority	REGULAR
Direct actors	User
Pre-Conditions	1. US1.
Post-Conditions	-
Senario	1. The user write down a live URL in the search box. 2. The user clicks the search button. 3. The system goes and scans the web page URL, extracts its meta-features. 4. The system then lists out suitable keywords related to the contents of the web page URL and a meta-description.

3 Use-cases

3.1 Actors

3.1.1 System Administrator

3.1.2 User

4 ERD Diagram

5 Testing Script

6 Conclusion