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FACULTY OF ENGINEERING
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Test Plan, Test Design Specifications and Test Cases

Version 1

CENG 408

Innovative System Design and Development II

PATENT COMPARISON SYSTEM

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1. INTRODUCTION

1.1 Version Control

Version No	Description of Changes	Date
1.0	First Version	May 22, 2020

1.2 Overview

During the testing phase of our project, the efficiency of our patent benchmarking system will be tested. At the end of this test, we aim to show how reliable our project is and how useful it is.

1.3 Scope

The efficiency of our project will be determined within the scope of this document. Briefly, it covers the subjects on which our project has been tested. These topics

1.) General Analysis of Patents
2.) Similarity Rates
3.) Sequencing Speed of Similar Patents

1.4 Terminology

Acronym	Definition
Patent Registration System	Users can add new patents to the system.
Patent Search System	The user can compare with the patent search system
Similarity Ratios	Similarity rates will be shown in percent
Similar Patent Representation	Similar patents will be displayed to the user

2.FEATURES TO BE TESTED

We aim to test every detail in our system. Our patent insertion system, our patent similarity system an finally we will test our system of presenting similar patents.

2.1 Graphical User Interface (GUI)

In the project, it is for the graphical user interface. The GUI section is divided into three sections: Main Menu, user panel and button. Each part of the GUI also includes smaller parts. GUI section, button, panel, text etc. It includes testing the functions of the GUI components used in the project, such as.

2.1.1 Web Site Interface

There will be a button on the website with links and articles that will be useful for understanding the patent content. It will be checked whether these buttons are oriented correctly. The user will enter their information in order to use our application. It will be tested whether this information is correctly recorded in the database.

2.1.1.1 Adding a Patent (AP)

In this section, the user will enter the patent content. There are 2 types of users. Users will save the invention contents to the system. We will check that the patent data registered by our users to the system will be recorded correctly.

2.1.1.2 Patent Comparison (PC)

In this section, we will test the system that allows users to compare the patent files with other patent contents in the system and test the similarity given to the screen.

2.1.1.3 Patent Result (PR)

In this section, we will test the patents listed for our user.

3. FEATURES NOT TO BE TESTED

We will determine the criteria for the patent comparison algorithm ourselves. These criteria may vary from person to person, so we cannot test the accuracy of the similarity rate.

4. ITEM PASS/FAIL CRITERIA

If our system's patent registration system and patent comparison system provide 60 percent data as a result of the test, it means that it failed.

Exit Criteria

- 100% of the test cases are executed
- 70% of the test cases passed
- All High and Medium Priority test cases passed

5. REFERENCES

[1] https://github.com/CankayaUniversity/ceng-407-408-2019-2020-Patent-Comparison-System/wiki/Software-Design-Document(SDD)

[2] https://github.com/CankayaUniversity/ceng-407-408-2019-2020-Patent-Comparison-System/wiki/Software-Requirements-Specifications(SRS)

6. TEST DESIGN SPECIFICATIONS

6.1 Graphical User Interface (GUI)

6.1.1 Subfeatures to be tested

6.1.1.1 Useful_Information Button(GUI_Info)

User can access detailed information about the patent by using this button.

6.1.1.2 User Login Button (GUI_UserLog)

The user must login to the system by entering the password in order to use the system.

6.1.1.3 Guest Login Button(GUI_GuesstLog)

Users who want to use the application as a guest can use this button

6.1.1.4 See_Old_Reports Button(GUI_SeeRep)

Member users can use this button to see all the results of their comparison.

6.1.1.5 Make_New_Comparison Button (GUI_NewComp)

All users can use this button to compare their patents.

6.1.1.6 Yes_Patent Button(GUI_Yespat)

User will use this button if he/she patent owner

6.1.1.7 No_Patent Button(GUI_Nopat)

If the user is not a patent holder, he/she will use this button

6.1.1.8 Save_Info Button(GUI_Save)

The user will use this button after entering the data to be entered. The data is saved to the database.

6.1.1.9 Exit_Button(GUI_Ex)

Participant can close the application with selecting “Exit” button.

6.1.1.10 Admin Login (GUI.ADLG)

Admin have to login to the system by entering password for being able to change patent.

6.1.1.11 Admin Control (GUI.ADC_ADDQ)

Administrators can check the patent contents by entering the system.

6.1.1.12 Admin Control Delete Patent (GUI.ADC_DELQ)

Admins can delete patent from the system by entering the patent ID of the information from the information list.

6.1.1.13 Admin Control Update Patent(GUI.ADC_UPDQ)

Admins can update patent from the system by entering the patent ID of the information from the information list.

6.1.2 Test Cases

Here list all the related test cases for this feature

TC ID	Requirements	Priority	Scenario Description
LG.AD.xx	*Give corresponding requirement no*	*High or Medium or Low*	*A brief description*
GUI_Info	**6.1.1.1**	**H**	It is accessed in detail about the patent..
GUI_UserLog	**6.1.1.2**	**H**	Login to the system with a password
GUI_GuesstLog	**6.1.1.3**	**H**	Those who do not want to be a member of the system use.
GUI_SeeRep	**6.1.1.4**	**H**	Members see comparison results
GUI_NewComp	**6.1.1.5**	**H**	Used for patent comparison
GUI_Yespat	**6.1.1.6**	**H**	This is the button used by patent holders
GUI_Nopat	**6.1.1.7**	**H**	Uses this button if the user does not have a patent.
GUI_Save	**6.1.1.8**	**H**	The data are saved in the database.
GUI_Ex	**6.1.1.9**	**L**	Exit application panel

GUI.ADLG	**6.1.1.10**	**M**	The administrator must log into the system for a patent change.
GUI.ADC_ADDQ	**6.1.1.11**	**H**	It can check the patent content.
GUI.ADC_DELQ	**6.1.1.12**	**H**	Administrators can delete patent information from the system.
GUI.ADC_UPDQ	**6.1.1.13**	**H**	Administrators can update patents in the system.

6.2 WebSite Interface

6.2.1 Subfeatures to be tested

6.2.1.1 Adding a Patent (AP)

Our members can add patents to our system.

6.2.1.2 Patent Comparison (PC)

Those who use it with the patent comparison system can make a patent comparison.

6.2.1.3 Patent Result (PR)

Users see the patent results they compare.

6.2.2 Test Cases

Here list all the related test cases for this feature

TC ID	Requirements	Priority	Scenario Description
AP	6.2.1.1	H	Adding multiple patents to the system.
PC	6.2.1.2	H	Comparing the newly entered patent with others.
PR	6.2.1.3	H	List all patent results.

7. DETAILED TEST CASES

7.1 AP.AD.01

TC_ID	AP.AD.01
Purpose	Adding patents to the system.
Requirements	1.1.1.1
Priority	High.
Estimated Time Needed	5 Minutes
Dependency	The administrator must be online on the system.
Setup	The admin interface opens..
Procedure	[A01] Admin logs on to the system.
	[A02] It enters the patent data into the system.
	[A03] Presses the save to system button.
	[A04] Click on the “Login” button.
	[V01] The patent is successfully registered on the system.
Cleanup	Logout

7.2 AP.GT.01

TC_ID	AP.GT.01
Purpose	Adding patents to the system.
Requirements	1.1.1.2
Priority	High.
Estimated Time Needed	5 Minutes
Dependency	The guest user must be a member of the system.
Setup	For members, the page opens.
Procedure	[A01] The user must be a member of the system.
	[A02] It must be online in the system.
	[A03] Adds patent information to the system.
	[A04] Data is saved to the system with the Save button.
	[V01] Observe that the login is successful and the admin page appears
Cleanup	Close page

7.3 PC.AD.01

TC_ID	PC.AD.01
Purpose	Patent comparison
Requirements	1.1.3.1
Priority	High.
Estimated Time Needed	8 Minutes
Dependency	Patent comparison and results
Setup	Admin page must be online
Procedure	[A01] The system is also online.
	[A02] Patent data is entered..
	[A03] Comparison data are selected.
	[A04] The system compares.
Cleanup	Logout

7.4 PC.GT.01

TC_ID	PC.GT.01
Purpose	Patent comparison
Requirements	1.1.3.2
Priority	High.
Estimated Time Needed	8 Minutes
Dependency	Patent comparison and results
Setup	Guest must not be online.
Procedure	[A01]Patent data is entered.
	[A02] Comparison data are selected.
	[A03] The system compares.
Cleanup	Close Page

7.5 PR.AD.01

TC_ID	PR.AD.01
Purpose	Viewing patent results
Requirements	1.1.5.1
Priority	High.
Estimated Time Needed	5 Minutes
Dependency	Admin must be online
Setup	The system must be open.
Procedure	[A01] The manager goes online in the system.
	[A02] Patents are entered into the system.
	[A03] Search button is pressed.
	[A04] The results are listed in detail.
Cleanup	Logout

7.6 PR.GT.01

TC_ID	PR.GT.01
Purpose	Viewing patent results
Requirements	1.1.5.2
Priority	High.
Estimated Time Needed	5 Minutes
Dependency	Guest should not be online
Setup	The system must be open.
Procedure	[A01] Patents are entered into the system.
	[A02] Search button is pressed.
	[A03] The results are listed as a percentage. There is no detail.
Cleanup	Close Page