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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

**SUMMER TRAINING
INFORMATION SYSTEM**

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Table of Contents

İçindekiler

1. INTRODUCTION	1
1.1 Version Control.....	1
1.2 Overview.....	1
1.3 Scope.....	1
1.4 Terminology.....	1
2. FEATURES TO BE TESTED	2
2.1 User Interface (UI)	2
2.2 User-Owned Transactions (UT).....	2
2.3 Car Parking Transactions (CT)	2
3. FEATURES NOT TO BE TESTED	2
4. ITEM PASS/FAIL CRITERIA	2
4.1 Exit Criteria.....	2
5. REFERENCES	2
6. TEST DESIGN SPECIFICATIONS.....	3
6.1 User Interface (UI)	3
6.1.1 Subfeatures to be tested	3
6.1.2 Test Cases	4
7. Detailed Test Cases	6
7.1 UI.SIn_Button.....	6
7.2 UI.RPassword_Button.....	6
7.3 UI.SUp_Button	7
7.4 UI.Search_Button.....	7
7.5 UI.Profile_Button.....	8
7.6 UI.PEdit_Button.....	8
7.7 UI.RVehicles_Button.....	9
7.8 UI.RPlate_Button.....	9
7.9 UI.MReservations_Button	10
8. Test Results.....	10

1. INTRODUCTION

1.1 Version Control

Version No	Description of Changes	Date
1.0	First Version	April 16, 2021

1.2 Overview

On-Cloud Parking Management System users namely participant and procedure which had been determined in SRS document will be tested.

1.3 Scope

This document scenarios the test plan of the use cases, test design features and the test cases correspond to test plan.

1.4 Terminology

Acronym	Definition
UI	User Interface
UT	User-owned Transaction
CT	Car Parking Transaction

2. FEATURES TO BE TESTED

This section lists and gives a brief description of all the major features to be tested. For each major feature there will be a Test Design Specification added at the end of this document.

2.1 User Interface (UI)

In this project, native frontend was used. An understandable, effective user interface with high visual quality is important for mobile applications. The user interface is divided into three main headings in this application as user login / registration processes as main sections, parking lot information as the main section and a profile section for user requests. There are additional parts in the interface of the application. User interface operations will be tested in this section.

2.2 User-Owned Transactions (UT)

The basis of this project is designed to be user-friendly, so the user-related transactions, for example, the security of the application (user data), easy access to the desired parking information, the user's information can be updated, etc. components will be tested.

2.3 Car Parking Transactions (CT)

This project was started considering the needs of the parking lot, therefore, it will be tested to transfer the parking information to the user in a correct and safe way, to process the visual of the map information by taking the latitude and longitude information, and to follow the changing parking information to keep it up to date.

3. FEATURES NOT TO BE TESTED

Two main topics will not be tested in our application.

Performance Test: By changing the connection from 3G to WIFI, sharing documents, battery consumption, etc. test the performance of the application by doing.

Operational Tests: Testing of data backup and recovery plans.

4. ITEM PASS/FAIL CRITERIA

Describe the general rule to use to decide when a test case passes and when it fails.

4.1 Exit Criteria

- 100% of the test cases are executed.
- 95% of the test cases passed.
- All High priority test cases passed

5. REFERENCES

[1] Group11_On-Cloud Parking Management System_SRS , 16 April 2021

[2] Group11_On-Cloud Parking Management System_SDD , 16 April 2021

6. TEST DESIGN SPECIFICATIONS

6.1 User Interface (UI)

6.1.1 Subfeatures to be tested

6.1.1.1 Sign In (UI.SIn_Button)

If the user is registered after logging into the application, he / she is directed to the main page by selecting the "Sign In" button. If not, he / she is directed to the registration creation page by selecting the "Sign Up" button.

6.1.1.2 Reset Password (UI.RPassword_Button)

If the user has forgotten his / her password information, he / she creates a new password via e-mail by selecting the "Reset Password" button.

6.1.1.3 Sign Up (UI.SUp_Button)

If the "Sign Up" button has been selected, the user enters the requested information here (Name, Username, e-mail, password, phone). It creates a profile of its own.

6.1.1.4 Search (UI.Search_Button)

If the user selects the "Search" button, he will see the list of districts in Ankara.

6.1.1.5 Profile (UI.Profile_Button)

If the user selects the "Profile" button, they get their car and personal information.

6.1.1.6 Profile Edit (UI.PEdit_Button)

If the user selects the "Profile Information" button, they will access the information they entered during registration.

6.1.1.7 Registered Vehicles (UI.RVehicles_Button)

If the user selects the "Registered Vehicles" button, the vehicle information they have entered is accessed.

6.1.1.8 Registered Plate (UI.RPlate_Button)

If the user selects the "Registered Plate" button, the license plate information of the vehicle she has entered is accessed.

6.1.1.9 Make Reservations (UI.MReservations_Button)

If the user selects the "Make Reservations" button, they can access and search the parking lot number on the page it is viewing.

6.1.2 Test Cases

TC ID	Requirements	Priority	Scenaio Description
(UI.SIn_Button)	3.2.1	H	After the user logs into the application, the "Login" button is selected and it is directed to the main page.
(UI.RPassword_Button)	3.2.1	H	If the user has forgotten his / her password information, he / she creates a new password via e-mail by selecting the "Reset Password" button.
(UI.SUp_Button)	3.2.1	H	If the "Sign Up" button has been selected, the user enters the requested information here. It creates a profile of its own.

TC ID	Requirements	Priority	Scenaio Description
Search (UI.Search_Button)	3.2.2	M	If the user selects the "Search" button, he will see the list of districts in Ankara.
Profile(UI.Profile_Button)	3.2.2	M	If the user selects the "Profile" button, they get their car and personal information.

On-Cloud Parking Management System

TC ID	Requirements	Priority	Scenaio Description
Profile Information(UI.PInformation_Button)	3.2.3	L	If the user selects the "Profile Information" button, they will access the information they entered during registration.
Registered Vehicles(UI.RVehicles_Button)	3.2.3	L	If the user selects the "Registered Vehicles" button, the vehicle information they have entered is accessed.
Registered Vehicles(UI.RVehicles_Button)	3.2.3	L	If the user selects the "Registered Vehicles" button, the vehicle information they have entered is accessed.

TC ID	Requirements	Priority	Scenaio Description
Make Rezervations (UI.MRezervations_Button)	3.2.2	H	If the user selects the "Make Reservations" button, they can access and search the parking lot number on the page it is viewing.

7. Detailed Test Cases

7.1 UI.Sign_Button

TC_ID	UI.Sign_Button
Purpose	Launches the main page correctly.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	1 Minutes
Dependency	Application running.
Setup	The application must be downloaded to the phone.
Procedure	[A01] Go to sign in page.
	[A02] Enter a valid gsm number.
	[A03] Enter the valid password for this user
	[A04] Click on the “Sign In” button.
	[V01] Observe that the login is successful and the main page appears
Cleanup	Logout

7.2 UI.Reset_Password_Button

TC_ID	UI.Reset_Password_Button
Purpose	Creating a new password for the user.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	1 Minutes
Dependency	User must be registered
Setup	The application must be downloaded to the phone.
Procedure	[A01] Select “Reset Password” button from Sign In.
	[A02] Enter a new password and update it.
	[V01] Observe that the password has been successfully changed.
Cleanup	Go back to previous page.

7.3 UI.SUp_Button

TC_ID	UI.SUp_Button
Purpose	Creating a new user.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	1 Minutes
Dependency	Application running.
Setup	The application must be downloaded to the phone.
Procedure	[A01] Select "Sign Up" button from Sign In.
	[A02] Create a new user by entering the information.
	[V01] Observe that the new user has been created successfully.
Cleanup	Logout

7.4 UI.Search_Button

TC_ID	UI.Search_Button
Purpose	User can search.
Requirements	3.2.2
Priority	Medium.
Estimated Time Needed	1 Minutes
Dependency	logs in by selecting the "Sign In" button.
Setup	The application must be downloaded to the phone.
Procedure	[A01] Select the "Search" button from the main page.
	[A02] Ankara districts are listed.
	[A03] Word is entered and search is made.
	[V01] Results related to the searched word are listed.
Cleanup	Go back to previous page.

7.5 UI.Profile_Button

TC_ID	UI.Profile_Button
Purpose	The page with the user information.
Requirements	3.2.2
Priority	Medium.
Estimated Time Needed	1 Minutes
Dependency	Opens the profile by selecting the "Profile" button.
Setup	The application must be downloaded to the phone.
Procedure	[A01] Select the "Profile" button from the main page.
	[V01] Profile information can be accessed.
Cleanup	Go back to previous page.

7.6 UI.PEdit_Button

TC_ID	UI.PEdit_Button
Purpose	Updating profile information
Requirements	3.2.3
Priority	Low.
Estimated Time Needed	1 Minutes
Dependency	Opens the profile edit by selecting the "Profile Edit" button
Setup	The application must be downloaded to the phone.
Procedure	[A01] Select the "Profile Edit" button from the profile page.
	[V01] Profile update can be done on the page that opens.
Cleanup	Go back to previous page.

7.7 UI.RVehicles_Button

TC_ID	UI.RVehicles_Button
Purpose	Adding and updating registered vehicle information
Requirements	3.2.3
Priority	Low.
Estimated Time Needed	1 Minutes
Dependency	Opens the registered vehicles by selecting the "Registered Vehicles" button
Setup	The application must be downloaded to the phone.
Procedure	[A01] Select the "Registered Vehicles" button from the profile page.
	[V01] Vehicles update can be done on the page that opens.
Cleanup	Go back to previous page.

7.8 UI.RPlate_Button

TC_ID	UI.RPlate_Button
Purpose	Adding and updating registered plate information
Requirements	3.2.3
Priority	Low.
Estimated Time Needed	1 Minutes
Dependency	Opens the registered plate by selecting the "Registered Plate" button
Setup	The application must be downloaded to the phone
Procedure	[A01] Select the "Registered Plate" button from the profile page.
	[V01] Vehicles plates update can be done on the page that opens.
Cleanup	Go back to previous page.

7.9 UI.MReservations_Button

TC_ID	UI.MReservations_Button
Purpose	Make a reservation by search
Requirements	3.2.2
Priority	High.
Estimated Time Needed	1 Minutes
Dependency	A phone call is made by selecting the "Make Reservations" button.
Setup	The application must be downloaded to the phone
Procedure	[A01] Select the "Make Reservations" button from the descriptions page.
	[V01] Phone information is accessed.
	[A02] A phone call can be made.
	[V01] After the process is completed successfully, the application is exited.
Cleanup	Logout

8. Test Results

8.1 Individual Test Results

TC ID	Date Run	Priority	Result	Explanation
(UI.SIn_Button)	27.05.2021	H	Pass	After the user logs into the application, the "Login" button is selected and it is directed to the main page.
(UI.RPassword_Button)	27.05.2021	H	Pass	If the user has forgotten his / her password information, he / she creates a new password via e-mail by selecting the "Reset Password" button.
(UI.SUp_Button)	27.05.2021	H	Pass	If the "Sign Up" button has been selected, the user enters the requested information here. It creates a profile of its own.

On-Cloud Parking Management System

Search (UI.Search_Button)	27.05.2021	M	Pass	If the user selects the "Search" button, he will see the list of districts in Ankara.
Profile(UI.Profile_Button)	27.05.2021	M	Pass	If the user selects the "Profile" button, they get their car and personal information.
Profile Information(UI.PInformation_Button)	27.05.2021	L	Pass	If the user selects the "Profile Information" button, they will access the information they entered during registration.
Registered Vehicles(UI.RVehicles_Button)	27.05.2021	L	Pass	If the user selects the "Registered Vehicles" button, the vehicle information they have entered is accessed.
Registered Licence Plate(UI.RLicencePlate_Button)	27.05.2021	L	Pass	If the user selects the "Registered Licence Plate" button, the plate information they have entered is accessed.
Make Rezervations (UI.MRezervations_Button)	27.05.2021	H	Pass	If the user selects the "Make Rezervations" button, they can access and search the parking lot number on the page it is viewing

8.2 Summary of Test Results

Priority	Number of TCs	Executed	Passed
H	4	4	4
M	2	2	2
L	3	3	3
Total	9	9	9

Criteria	Yes/No
%100 of test cases were achieved	Yes
Over %95 of test cases terminated	Yes
Over %95 of High and Medium Priority test cases achieved	Yes
No high priority or serious errors are noticeable	Yes