
Software Requirements Specification

for

ITP SITE

Prepared by

Name:

Mitre Flavia Antonia

CEN 3.1

Instructor:

Stoica Spahiu-Cosmin

Course:

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1 Introduction

This part of our document gives an overview of everything that is written in this Software Requirements Specification document and describes the process of developing our application.

1.1 Document Purpose

The purpose of this document is to give a detailed description of the requirements for our software. It will illustrate the purpose and complete description of the development of the system. It will also explain system constraints, interface, interactions with others external users and how user-friendly the application was made.

This document is primarily intended to be used by the client and by the developing team, to understand the development of our application. It will present the scope of our application, its functionality alongside the end users privileges on the app.

1.2 Product Scope

The application "ITP SITE" was made for people who need to check if their ITP insurance is still available or not, by finding out the expiration date for their car. The users will be able to check the car itp availability by using it's body series or CIV series. They can also see a list of all the registered cars. The admins can add cars to the site.

The goal of this software application is to facilitate the people to pay their ITP insurance, and not the fine.

1.3 Definitions, Acronyms and Abbreviations

No.	Definitions	Description
1	Application server	An application server is a software framework that provides both facilities to create web applications and a server environment to run them.
2	Web server	A web server is server software, or hardware dedicated to running this software, that can satisfy client requests on the World Wide Web.
3	Database	A database is an organized collection of data, generally stored and accessed electronically from a computer system.
4	User	Someone who interacts with the web application
5	Admin/Administrator	System administrator who is given specific permission for managing and controlling the system
6	Stakeholder	Any person who has interaction with the system who is not a developer.

No.	Acronyms	Description
1	SRS	Software Requirement Specifications
2		
3		

No.	Abbreviations	Description
1	App	Application
2		
3		

1.4 References and Acknowledgments

N.o.	Reference	Description
1	https://www.tutorialspoint.com/asp.net/index.htm	This site was used to accomplish a base of knowledge over asp.net core, that shall be used in developing the application later
2	MISRA-C: 2004	Used for software quality attributes.
3	<i>IEEE830 standard</i>	The current document uses this standard template.

2 Overall Description

This section will present an overview of whole system. The system will be explained in its context to show how the system interacts with users and introduce the basic functionality of it. It will also describe what functionality is available for each type of user. Also, the constraints and assumptions for the system will be presented.

2.1 Product Functionality

The application “ITP Site” was developed for people who need to check their ITP availability. The Application has client users and administrators. Every type of user has a different kind of account and a different set of permissions.

Every user can access his account with a username and a password, this connects the application to a database. It allows a client user to see all the registered cars, to check a specific car's ITP availability, to add a review of the site, or to delete their account.

The application allows an administrator to add cars to the site and to manage/change their personal data.

2.2 End Users and Characteristics

Each user has a unique account (with a username and a password) with two different types of users' levels: admin and client user. That includes multiple actions for 2 types of user:

- Client Users:
 - See registered cars
 - Check a specific car's ITP availability using CIV or body series
 - Manage/change their data
 - Delete their accounts

The client can be any computer-user that navigates on the internet. The person needs to have basic computer skills and knowledge about internet browsing. Also, the client can be any person that wishes to see if a car has an available ITP insurance.

- Admin Users:
 - Add cars
 - Add site rules
 - Manage/change their data

The admin must be a person hired by the Romanian country to maintain the current cars updated on the site and add new ones. The admin must have a good understanding of computer usage and basic data-base management skills.

2.3 System Stakeholders

The owner of this application is the Romanian country. Below is a comprehensive list of the stakeholders of this software application. The stakeholders will have the privileges of potential profits made from this app alongside the potential risk that should be managed by them.

2.3.1 Internal Stakeholders:

- The Romanian country employees
- Employees who own shares/bonds of the cars

2.4 Operating Environment

Below are the minimum system requirements so that a user can run our application:

- ❖ Microsoft Windows 7 at least installed
- ❖ Minimum Internet Speed: Above 10 Mb/s
- ❖ Microsoft .NET Core 3.1
- ❖ One of the next modern browsers:
 - ◆ Google Chrome 42 or newer
 - ◆ Opera 36 or newer
 - ◆ Microsoft Edge 12 or newer
 - ◆ Firefox 68 or newer

3 Specific Requirements

3.1 User Interface

Before logging on:



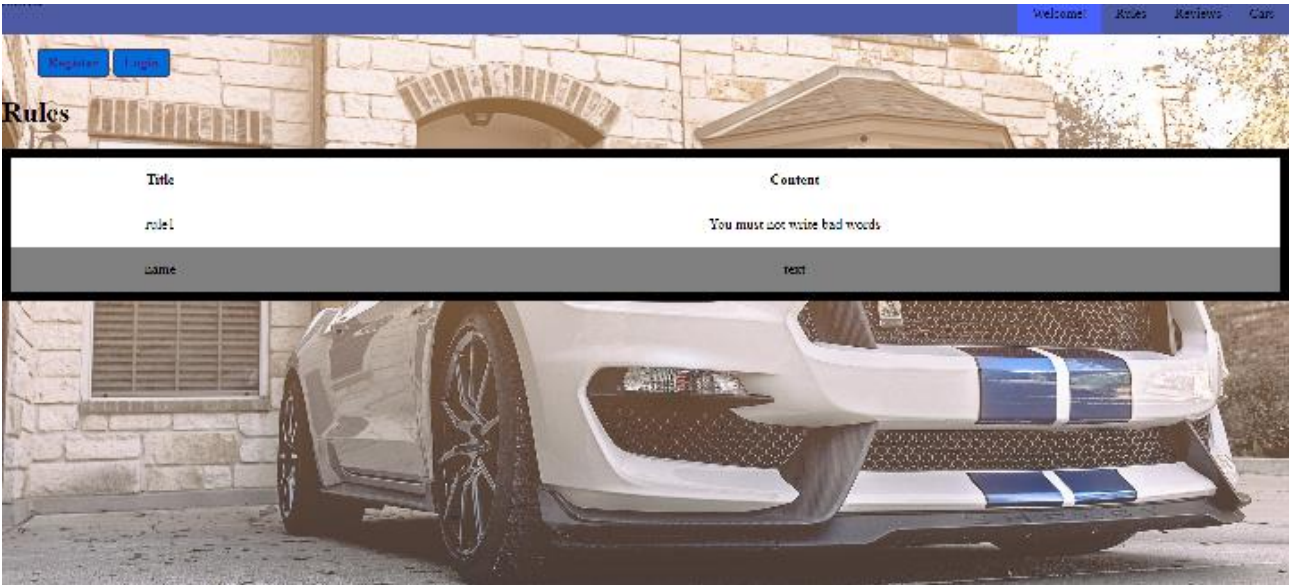
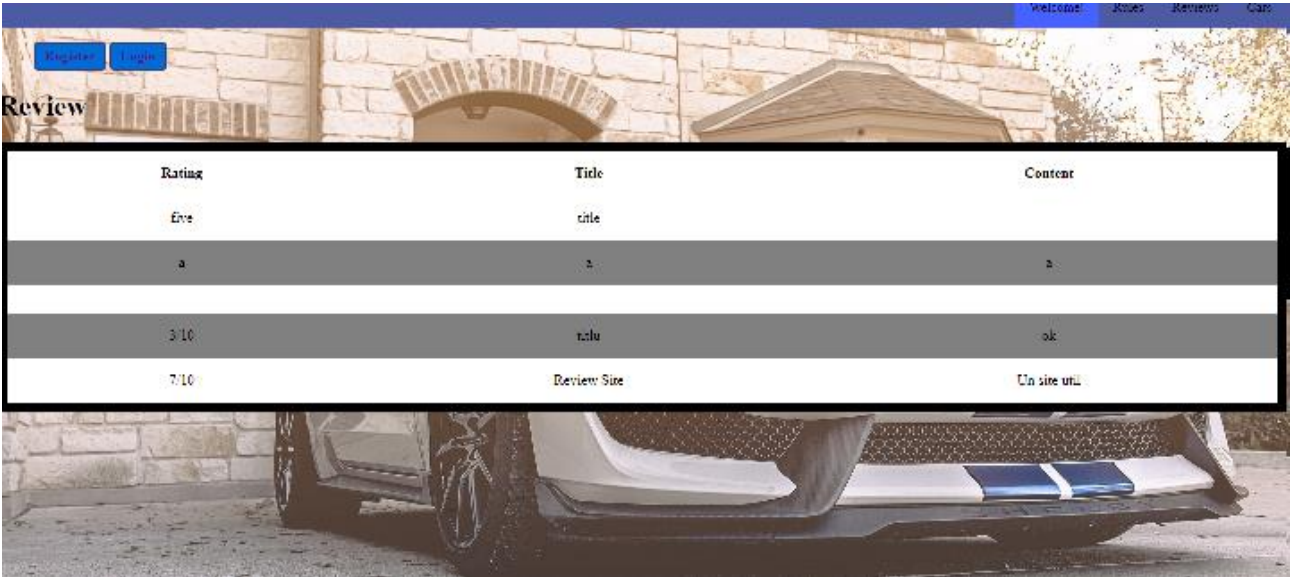


Users: Welcome Roles Reviews Cars

Register Login

Cars

Car Type	Car Series	Body Series	Car Mileage	Year Of Manufacture	Is Available	Owner First Name	Owner Last Name	Owner CNP
Mercedes	258Kolis34	ADD12DJ1	20000	2011	2022-02-09	Popescu	Andrei	29013532
			0	0		Popa	Popa	23561363
			0	0		Popa	Popa	2356513
BMW	23a	12a	12000	2010	2020-05-26	popa	ion	231213321
			0	0		a	a	a
a	a	a	1	1	2020-05-27	a	a	11a



After Client User login:

Admin only: Admin Home Add Car Add Rule
Client only: Client Home Add Review Search Car
Menu: Welcome Rules Reviews Cars

Admin Home Add Car Add Rule
Client Home Add Review Search Car
Menu: Welcome Rules Reviews Cars

Register Login

Cars

Search By: CIV Series Body Series

Search

Car Type	Civ Series	Body Series	Car Mileage	Year Of Manufacture	Updatability	OwnerFirstName	OwnerLastName	OwnerCNP
Mercedes	205K22031	ADBC2D01	20000	2011	2022-02-09	Popescu	Andrei	20510102
			0	0		Popa	Popa	20504565
			0	0		Popa	Popa	2050010
Infiniti	25a	17a	17000	2010	2020-06-26	popa	anu	204743134
			0	0		a	a	a
			1	1	2020-07-27	a	a	11x

Register Login

Review

Rating	Title	Content
Five	title	
a	a	a
3/10	title	ok
7/10	Review Size	Un size unit

Admins only: Admin Home Add Car Add Rule

Clients only: Client Home Add Review Search Car

Shared: Welcome Rules Reviews Cars

Hello and welcome to your account

Login

Cars

Search By:

CPU Series

Body Series

Search

Car Type	Civ Series	Body Series	Car Mileage	Year Of Manufacture	Reg Validity	Owner FirstName	Owner LastName	Owner CNP
Sedecades	205545151	ADBU22D91	20000	2011	2021-02-09	Popescu	Andrei	20540132
			0	0		Popa	Popa	20564565
			0	0		Popa	Popa	2056543
Immu	75x	12x	17000	2010	2020-06-26	popa	gmi	204245134
			0	0		a	a	a
			1	1	2020-03-27	a	a	11x

After Administrator User login:

Admin only: Admin Home Add Car Add Rule
Client only: Client Home Add Review Search Car
Shared: Welcome Rules Reviews Cars

Admin only: [Admin Home](#) [Add Car](#) [Add Rule](#)
Client only: [Client Home](#) [Add Review](#) [Search Car](#)
Shared: [Welcome](#) [Rules](#) [Reviews](#) [Cars](#)

[Admin only: Admin Home](#)
[Logout](#)

Add Car

Car Type:

Year of manufacture:

City/Region:

ITP number:

Body/Service:

Owner's first name:

Car Mileage:

Owner's last name:

Owner CNP:

[Add Car](#)

Admin only: Admin Home Add Car Add Rule
Client only: Client Home Add Review Search Car
Shared: Welcome Rules Reviews Cars

Admin only: [Admin Home](#) [Add Car](#) [Add Rule](#)
Client only: [Client Home](#) [Add Review](#) [Search Car](#)
Shared: [Welcome](#) [Rules](#) [Reviews](#) [Cars](#)

[Admin only: Admin Home](#)
[Logout](#)

Add Rule

Name:

Text:

[Add Rule](#)

Profile and possible changes for both Client and Administrator:

ITP_App [Logout](#)

Manage your account

Change your account settings

[Profile](#)[Email](#)[Password](#)[Two-factor authentication](#)[Personal data](#)

Profile

Username

Phone number

[Save](#)

ITP_App [Logout](#)

Manage your account

Change your account settings

[Profile](#)[Email](#)[Password](#)[Two-factor authentication](#)[Personal data](#)

Manage Email

Email

[✓](#)

New email

[Change email](#)

ITP_App [Logout](#)

Manage your account

Change your account settings

[Profile](#)[Email](#)[Password](#)[Two-factor authentication](#)[Personal data](#)

Change password

Current password

New password

Confirm new password

[Update password](#)

ITP_App [Logout](#)

Manage your account

Change your account settings

[Profile](#)[Email](#)[Password](#)[Two-factor authentication](#)[Personal data](#)

Personal Data

Your account contains personal data that you have given us. This page allows you to download or delete that data.

Deleting this data will permanently remove your account, and this cannot be recovered.

[Download](#)

[Delete](#)

3.2 Functional Requirements

3.2.1 User Class 1 – The User

3.2.1.1 Functional requirement 1.1

Title: User registration

Description: In order to use the application, each new user must go through the registration process. In order to create a new account, the user must provide his full name, a username, a password, etc... as well as his type of user.

Dependencies: None

3.2.1.2 Functional requirement 1.2

Title: User Log-in

Description: Given that the user has registered, in order to use the application, each user must go through the log in process. In order to enter in account, the user must provide username and his password.

Dependencies: FR1

3.2.1.3 Functional requirement 1.3

Title: User changes password

Description: In case the user wants to change his password, he must go through the change password process. In order to change the password, the user must provide his old password and his new password.

Dependencies: FR2

3.2.1.4 Functional requirement 1.4

Title: User can search for a ticket

Description: The client can search for cars

Dependencies: FR2

3.2.1.5 Functional requirement 1.5

Title: User can search for a specific car

Description: The client user can search for a specific car to see it's details. In order to do this, the user must provide the civ/body series needed.

Dependencies: FR2

3.2.1.6 Functional requirement 1.6

Title: User can add reviews

Description: The client can add reviews to the site, give a rating and leave a feedback.

Dependencies: FR2

3.2.1.7 Functional requirement 1.7

Title: User can log out.

Description: The user can log out of his account.

Dependencies: FR2

3.2.1.8 Functional requirement 1.8

Title: User can delete account

Description: The user can delete his account.

Dependencies: FR2

3.2.1.9 Functional requirement 1.9

Title: User can edit account

Description: The user can edit his account.

Dependencies: FR2

3.2.2 User Class 2 – The Administrator

3.2.2.1 Functional requirement 2.1

Title: User registration

Description: In order to use the application, each new user must go through the registration process. In order to create a new account, the user must provide his full name, a username, a password, etc... as well as his type of user.

Dependencies: None

3.2.2.2 Functional requirement 2.2

Title: User Log-in

Description: Given that the user has registered, in order to use the application, each user must go through the log in process. In order to enter in account, the user must provide username and his password.

Dependencies: FR1

3.2.2.3 Functional requirement 2.3

Title: User changes password

Description: In case the user wants to change his password, he must go through the change password process. In order to change the password, the user must provide his old password and his new password.

Dependencies: FR2

3.2.2.4 Functional requirement 2.4

Title: User can display cars

Description: The administrator can display all cars.

Dependencies: FR2

3.2.2.5 Functional requirement 2.5

Title: User can add a car

Description: The administrator can add a new car.

Dependencies: FR2

3.2.2.8 Functional requirement 2.8

Title: User can log out.

Description: The administrator can log out of his account.

Dependencies: FR2

3.2.2.9 Functional requirement 2.9

Title: User can delete account

Description: The administrator can delete his account.

Dependencies: FR2

3.2.2.10 Functional requirement 2.10

Title: User can edit account

Description: The user can edit his account.

Dependencies: FR2

3.3 Use Case Diagram

N/A.

4 Non-functional Requirements

4.1 Software Quality Attributes

This section will present the rules used in creating this application. This shall avoid future software problems/bugs by having a professional approach towards development:

- Rule 1: Source code shall only use `/* ... */` style comments
- Rule 2: Identifiers in an inner scope shall not use the same name as an identifier in an outer scope, and therefore hide that identifier
- Rule 3: All libraries used in production code shall be written to comply with the provisions of this document, and shall have been subject to appropriate validation

- Rule 4: For each function parameter the type given in the declaration and definition shall be identical, and the return types shall also be identical.
- Rule 5: A typedef name shall be a unique identifier.
- Rule 6: The value of a complex expression of floating type shall only be cast to a floating type that is narrower or of the same size.
- Rule 7: The sizeof operator shall not be used on expressions that contain side effects.
- Rule 8: There shall be no unreachable code.
- Rule 9: All if ... else if constructs shall be terminated with an else clause.
- Rule 10: The final clause of a switch statement shall be the default clause
- Rule 11: The three expressions of a for statement shall be concerned only with loop control.
- Rule 12: All exit paths from a function with non-void return type shall have an explicit return statement with an expression.

5 Other Requirements

5.1 Security

We are assuring the security of our Web Application through the use of certain methods:

- *“https” will be used instead of “http”*
- *Login and Password for the accounts of every user. It has different type of users and every user has access constraints because every type of user can make specific actions.*

5.2 Safety

N/A.