Software Requirements Specifications Individual
Traffic Tamer

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1. Introduction

1.1. Purpose

The primary aim of this SRS document is to define the requirements and design for the web application Traffic Tamer. The document aims to indicate a set of expectations and plans for how the systems will help simplify traffic regulations for users, aiming to help clarify confusing legal concepts dealing with traffic law.

1.2. Scope

The web application, Traffic Tamer, will help aid users in understanding traffic laws in layman's terms and the violations that may come along with breaking these laws. By making use of machine learning, the web application will provide simplified explanations of traffic laws and violations based on the user's input of their violation, location, and specific situation. The web application is not meant to be used as legal advice, but instead to be used as a tool to help the common person understand complex legal jargon on traffic laws.

1.3. Definitions, Acronyms, and Abbreviations

● **Apache:** An open-source web server software that is widely used to serve web content over the internet.

● **CSS (Cascading Style Sheets)**: A style sheet language used to describe the presentation of a document written in HTML or XML, defining the look and layout of a web page.

● **Docker:** A platform for developing, shipping, and running applications in containers. Containers are lightweight, portable, and self-sufficient environments that include all the necessary components to run a piece of software.

● **HTML (HyperText Markup Language):** The standard markup language used to create web pages. HTML elements are the building blocks of web pages.

● **JavaScript:** A programming language that enables interactive web pages and is an essential part of web applications. Along with HTML and CSS, it is one of the core technologies of the web.

● **Linux:** An open-source operating system based on UNIX. It is used to run servers, desktops, and mobile devices.

● **Machine Learning:** A branch of artificial intelligence that focuses on building systems that can learn from and make decisions based on data. ● **MySQL:** An open-source relational database management system (RDBMS) that uses SQL (Structured Query Language) to manage and manipulate databases.

● **SQLite:** A C-language library that implements a small, fast, self-contained, high reliability,

full-features, SQL database engine.

● **Node.js:** A JavaScript runtime built on Chrome's V8 JavaScript engine, allowing

developers to use JavaScript to write server-side code.

● **React:** A JavaScript library for building user interfaces, particularly single-page applications

where data changes over time.

● **State Court**: A court that has jurisdiction over disputes with some connections to a

U.S. state.

● **Traffic Law:** Rules and regulations that govern how vehicles operate on the roads and how

road users must behave to ensure safety and order.

● **Web Application**: An application software that runs on a web server and can be accessed

through a web browser.

1.4. References

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1.5. Overview

Section 2 of this SRS document will focus on providing a general overview of the program's

functionality and system interaction. This section will encompass the constraints and

assumptions of the systems that will be interacting with the program.

2. Overall Description

2.1. Product Perspective

Traffic Tamer is a web application that prioritizes the simplification of traffic laws and

violations, attempting to further educate the masses of traffic law violators, driver education

students, or legal students studying traffic law. The web application will use machine learning

in order to help simplify complex legal jargon to layman's terms and categorize traffic laws

based on user location.

2.2. Product Functions

Traffic tamer will allow users to:

● Create an account.

● Store user searches/simplifications.

● Search traffic laws by state & local codes.

● Receive simplified explanations of traffic laws.

● Stay updated with changes made to traffic laws in their state.

2.3. User Classes and Characteristics

Traffic Tamer is expected to help serve a number of groups, including:

● **General Drivers**: Those who need simple explanations of complex traffic laws.

● **Traffic Violators**: Those who may have had an incident regarding traffic laws and would like clarification on the law.

● **Driver Education/Improvement Students**: Students who are looking for a new tool to help them understand the many traffic laws of the road, especially focused on their specific state.

● **Law Students**: Law students can use the web application as a tool to gather quick and efficient information regarding traffic laws, especially if focusing on traffic law as their area of study.

2.4. Design and Implementation Constraints

N/A

2.5. Assumptions and Dependencies

N/A