Driftr

Final Report

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Table of Contents

[Version Information 1](#_Toc412140686)

[1 Executive Summary 2](#_Toc412140687)

[2 Introduction 2](#_Toc412140688)

[3 High Level Problem Summary 2](#_Toc412140689)

[4 Detailed Problem Statement 3](#_Toc412140690)

[5 Key Stakeholders 4](#_Toc412140691)

[6 Glossary 4](#_Toc412140692)

# Version Information

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| --- | --- | --- |
| Version | Date | Comments |
| 1.0 | 2/19/2015 | Initial Draft |

# 1 Executive Summary

This document describes the final report beginning with a description of the initial problem that this project aims to solve. Following this introduction, the problem solution, challenges of that solution, and database design summary. After the solution is presented, the strengths and weaknesses of the design are analyzed and discussed. Included at the end of this report is an appendix containing the final entity-relationship model and the final relationship schema for the system. Also present are a glossary, list of references, and an index.

# 2 Introduction

This is the first in a series of documents describing the Driftr match-making system. In the following pages there is a summary of the planned solution, it’s scope, as well as a description of the functionality and details of the system. An ER diagram immediately follows this problem statement. It abstractly describes the relationships among the data. This document will be followed by a relational schema, security analysis, project status reports, and ultimately a final project presentation covering the creation and design of the system as well as demonstrating the final product.

# 3 High Level Problem Summary

3.1 Elevator Statement

Drifter is a website that will match people with similar preferences for the purpose of professional driving excursions on closed courses.

3.2 Primary Success Criteria

New users need to be able to sign up with their vehicle information and preferences and be match to other users in their area with similar preferences. The system should keep track of events and event results. Users should be able to identify other users as friends and receive updates on their activity.

3.3 Scope

3.3.1 Within Scope

1. Users
2. Vehicles
3. Friends
4. Events
5. Locations (major cities)
6. Preferences

3.3.2 Outside Scope

1. Any preferences of users not pertinent to racing, such as dating, etc.
2. Any personally identifiable information such as address, license, etc.
3. Any content that suggest we indorse illegal street racing and related activities

# 4 Detailed Problem Statement

4.1 Function

1. Ability to track users and information about their vehicles
2. Ability to track user match preferences
3. Ability to track events and related data
   1. Results
   2. Location
   3. Participating users
4. Ability to track which users are friends with each other

4.2 Form

4.2.1 Availability

* Web site to be accessed from home computers or mobile devices
* User must be registered to be able to use the system

4.2.2 Usability

* Easy account creation and website usability
* Compatibility with current Internet Explorer, Firefox, and Chrome builds

4.2.3 Performance

* Support for upwards of 100 users at a time

4.2.4 Maintainability

* System must be able to support growth based on rate of user adoption
* The Driftr team will be the administrators as well as moderators for the immediate period after release.

4.3 Economy

Underground closed-circuit safety-regulation-following professional racing has been left in the dust by the social media boom. This untapped social media niche offers a social group ready to be advertised and marketed to.

4.4 Time

4.4.1 Past

Created in the rise of bootlegging operation during prohibition, stock-car racing has existed almost as long as the automobile industry in North America. In years since, the communication and organization has been dominantly word-of-mouth.

4.4.2 Present

Just like pictures of your coworker’s baby, closed-circuit safety-regulation-following professional racing is ready to be exploited by online social media and data aggregation agencies.

4.4.3 Future

Along with every other aspect of life, closed-circuit safety-regulation-following professional racing will become web-based in the future, allowing enhanced organization as well as “like”-ing, “upvote”-ing, and “share”-ing capabilities.

# 5 Key Stakeholders

|  |  |
| --- | --- |
| Name | Role |
| Sriram Mohan | Project Advisor |
| Davis Nygren | Project Team |
| Jacob Ryan | Project Team |
| Daniel Lehman | Project Team |
| Closed-Circuit Safety-Regulation-Following Professional Racers | End User Base |

# 6 Glossary

Entity – Relationship (ER) Diagram – A symbolic abstraction of a database

CCSRFPR - closed-circuit safety-regulation-following professional racing