

# Driftr

## Problem Statement

**Rose-Hulman Institute of Technology – CSSE 333-01**

Davis Nygren

Jacob Ryan

Daniel Lehman

## Table of Contents

Driftr.....	1
Problem Statement.....	1
Version Information.....	2
1 Executive Summary.....	3
2 Introduction .....	3
3 High Level Problem Summary .....	3
4 Detailed Problem Statement .....	4
5 Key Stakeholders.....	5
6 Glossary.....	5

## Version Information

Version	Date	Comments
1.0	1/9/15	Initial Draft
1.1	1/12/15	Grammar Corrections

## 1 Executive Summary

The aim of this document is to provide a description of the problem to be solved by this project. This document is intended as an introduction to the problem and the proposed solution, which will be described in greater detail by later documents. An entity-relationship, hereon ER, diagram was also created alongside this document. Also contained in this document are a high level problem summary, a detailed problem statement, and a summary of the key stakeholders involved in the project.

## 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

Driftr 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
  - a. Results
  - b. Location
  - c. 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