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# Abstract

Erie Insurance currently works with its agents to help them display the dangers of distracted driving to their policy holders. This can often be very difficult for agents to do since the user is not able to experience the consequences of distracted driving for themselves in a safe way. In order to help solve this problem for the agents, we are creating a virtual reality experience to demonstrate how distracted driving can affect the policy holder. This virtual reality experience will utilize the Unity 3D engine and the Google Cardboard SDK to give the policy holder different scenarios in which they will have to make decisions influencing their outcome. This virtual reality experience will allow the policy holder to better understand how they can influence dangerous driving activities as well as to help stop them.

# Report Revision History

# Problem Statement

## Business Background

Erie Insurance is a Fortune 500 insurance company employing thousands of people. Erie Insurance has been a figure in the insurance world for 90 years, and currently serves over 4 million customers in 13 states. They utilize and manage smaller agencies to deal directly with customers, selling them auto, home, life, and business insurance.

With the rise of technology, distracted driving has become more of a risk than ever before. As Erie Insurance is invested in protecting people, they are taking the initiative in informing families about the dangers of driving while distracted.

## Needs

Currently, it is very difficult to display the dangers of distracted driving to a younger generation in a way that engages them. Erie Insurance is seeking an innovative solution in order to solve this problem.

## Objectives

This project aims to utilize virtual reality technology to create an immersive experience that engages users of all ages. The application will be easily distributed to agents around Erie's footprint and will effectively capture the younger audience.

# Requirements

## User Requirements

### Glossary of Relevant Domain Terminology

### Virtual Reality (VR) – A simulation of a three dimensional environment

### Cardboard – Google’s SDK created for smartphone devices

### Headset – A head mounted device that displays virtual reality devices

### User Groups

### User – Any person engaging in our experience

### Functional Requirements

#### Project Scope (Use Case Diagram)

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#### User Scenarios

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#### List of User Functional Requirements

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### Non-functional Requirements

#### Product: Usability Requirements

#### Product: Performance Requirements

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#### Product: Dependability/Security Requirements

#### Organizational: Development Requirements

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#### Organizational: Operational Requirements

#### Organizational: Environmental Requirements

#### External: Safety/Security Requirements

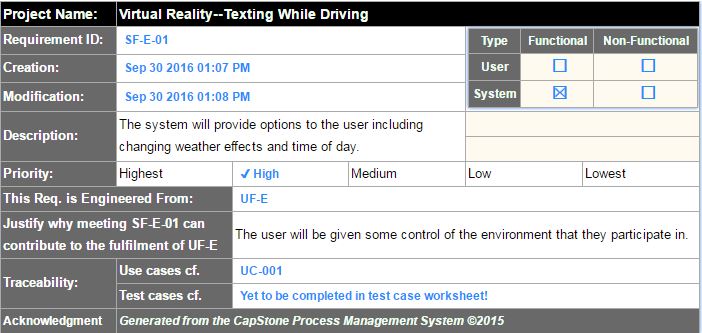
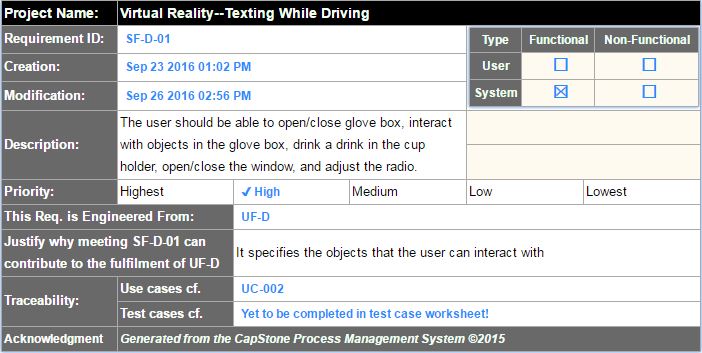
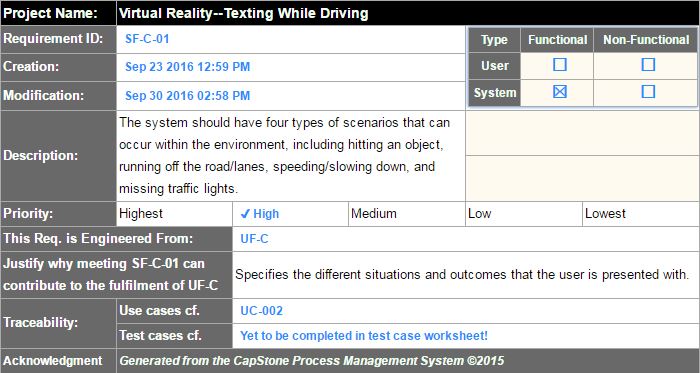
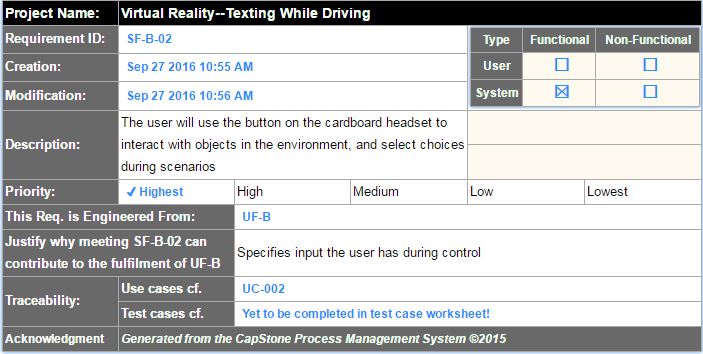
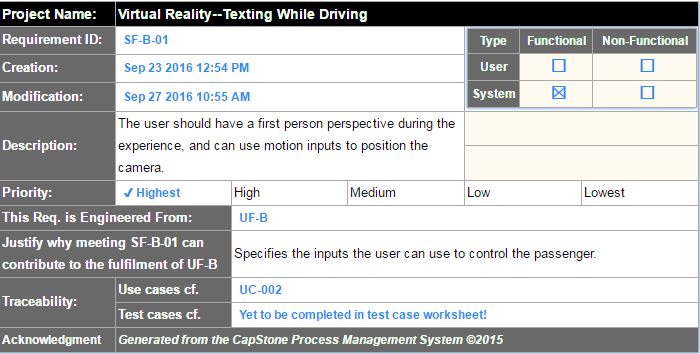
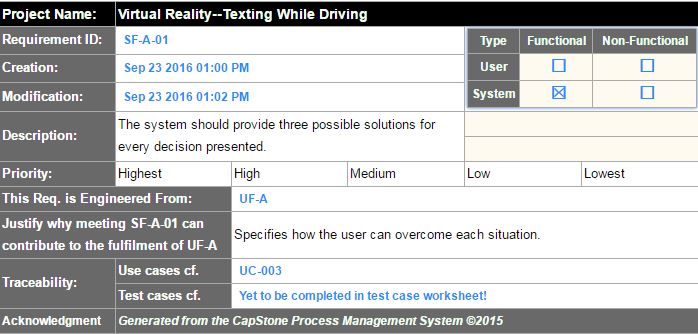
#### External: Cultural and Social Requirements

#### External: Political Requirements

## System Requirements

### Functional Requirements

#### List of System Functional Requirements



#### System Behavior

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#### Data Requirements

### Non-functional Requirements

#### Product: Usability Requirements

#### Product: Performance Requirements

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#### Product: Dependability/Security Requirements

#### Organizational: Development Requirements

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#### Organizational: Operational Requirements

#### Organizational: Environmental Requirements

#### External: Safety/Security Requirements

#### External: Cultural and Social Requirements

#### External: Political Requirements

## Requirements Trace Table

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