

**INFORMATICS INSTITUTE OF TECHNOLOGY**

**In Collaboration with**

**UNIVERSITY OF WESTMINSTER (UOW)**

## **Carpooling System**

A dissertation by

Sasini Jayampath

Supervised By

Dr.Thilak Chaminda

Submitted in partial fulfilment of the requirements for the

BEng. (Hons) in Software Engineering

Department of Computing

May 2018

©The copyright for this project and all its associated products resides with  
Informatics Institute of Technology

### **Abstract**

Carpooling has grown to be a practical, cheap and stress-free way to travel. Users can easily request for rides within 2-3 minutes. This project presents the requirement, design and implementation of a carpool application. There are two kinds of trips. They are single trips, which are trip between two cities, and frequent trips which are the ones that travelers do every day. The check-in system assists users to check in meetings points and inform all users about that. Users can also share their activities on the application thanks to social media. The application is designed to be extensible , scalable , highly available and with a good performance. The server is implemented using swift language. For the scope of this project, one client application is developed using iOS and Web client may be an improvement to this project given that the server is compatible with these technologies as previously stated.

### **Key Words:**

Ride Matching, Carpooling, Cocoa Touch framework