

# Development of Online Taxi Ridesharing Application

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*Abstract – the paper highlights the main principles and modalities for developing a mobile application for sharing the ride via online taxi based on the use of innovative software elements and logistic flow management models. The proposed approach for the development of application is based on the latest marketing course, the use of logistic models and the elimination of analogues.).*

Keywords – ridesharing, sustainable development, taxi, alternative commuting means of transport, ecological awareness.

## Introduction

Today public transportation services are very common for modern society, whether it is a traditional taxi or newer mobile-powered startup like Uber. Using these kinds of public transportation is not environmentally friendly, and does not reduce the car number on the roads or the amount of air pollution generated by vehicle engines. People are fully aware of the “smart cities”; infrastructure that relies upon digital information and communication technologies to make city living more efficient, more ecologically aware, and healthier [2].

One of the main ways in which that could be accomplished is through innovations designed to reduce road traffic congestion. The concept of ridesharing online taxi application is providing us with an opportunity to reduce pollution, implement sharing economy in the terms of sustainable development.

Smartphones have proven to be game-changers in the recent rise of urban transportation alternatives. Connecting via smartphone with online taxi ridesharing company by downloading an application with maps and route-planning tools. This type of communication is efficient and instant. With ecological awareness at an all-time high, these factors have combined to make ridesharing an increasingly prominent part of the contemporary transportation conversation [3].

## The aim

The main aim of this article is to introduce the idea of contemporary environmentally aware online taxi ridesharing application that is suggested as one of the solutions for modern “smart world”.

## Problems set-up

Despite numerous environmental problem cautions there is still a lack of promising approaches to effectively change peoples’ transportation mean towards sustainable solutions. By introducing the project in order to settle the process of ride sharing for commuting travel, this work will contribute to address the problem of single occupancy driving. ]By implementing an online taxi ridesharing application for commuter travel in real-life circumstances this work views ride sharing from a new perspective and thereby aims to gain new insights and to attempt to get one step closer to solve the problem of consumer behaviour change.

## Essence of research

Development fundamental factor of such a service is its unique combination of carpooling and ridesharing analogues like Blablacra and Uber respectfully.

In substantiating the topics of the project, the market of the transportation industry was taken into account by making comparisons with analogues. The information which was obtained during the research showed high competitiveness in the market and compliance with the general requirements of the characteristics, criteria for evaluation, comparison, and quality requirements.

### Compliance with general requirements:

- *unification*: the software product is unified by one system;
- *interoperability*: the system is open only for interactions with internal systems, and systems that interact only with elements of the developed software;
- *mobility*: the software has the ability to ship from one operating system to another;
- *user interface*: a user-friendly interface is available with many options.

The quality requirements of FURPS + give high praise to the project as a justification for its implementation.

One of the advantages of this system is the ability to combine many genres into one system thereby increasing the customer market and attracting more users from different genres in one system.

The development of the project is based on purchases, and subscriptions to the developed system. Attracting funds is a system of donates is also one of the ways of development through attracting additional funds.

The developed project is a combination of a login application logon, which protects your personal data, and the main platform. An application itself as a startup system for a developed project selects a test version or a paid subscription. When using a paid subscription, it is possible to use the system in its entirety without functional limitations in the test version.

*Within the framework of the developed project, the following main processes will take place:*

- *user registration*: if the user information in the database is not available, the system invites him to register to continue to work on the site with the help of Facebook or Google accounts.
- *ordering*: the system creates a new entry in the Order database and automatically brings to it all the details of the order received. Within this process we distinguish:
  - a) customer location data : the user enters his address or indicates his location on the map;
  - b) destination data: the user enters the destination address or marks it on the map;

The project is more innovation oriented towards both the software aspect, the marketing component and the logistics model. Innovative marketing aspect and economic progress in reaching a large number of users from different areas of interest, with the use of various routes of the gaming industry. This, of course, has a direct relationship with current ridesharing trends. As people continue to come together in new ways, transportation itself will keep changing and innovating.

It took the technological revolution, and the brand-new ways of thinking about the man-nature balance to bring it back in a big way. But it's back, and it's here to stay. As traffic congestion, urban pollution and social disconnectedness continue to pose major challenges which this project aims to solve. The design of the processes will equitably split the cost of the ride among the passengers as well as to fairly distribute the economic benefits of ride sharing between the drivers and the passengers. Finally, it is actually helping bring people together in "never before seen" ways and reawakening communities and the sense of interconnectedness that is so vital to life satisfaction.

### **Conclusions**

The project is innovative in various aspects, which gives a high distinction from analogues, which is not a negative feature, but rather a high indicator of competitiveness and uniqueness.

The work on such elements is unique both in technical terms and in terms of ideas, marketing process and the project as a whole.

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