

ANNEX IV – TECHNICAL DESCRIPTION FOR GROUP 2

1. GENERAL INFORMATION

Company Intenda Net d.o.o. is implementing "inITS" project, in accordance with the project application submitted for the Call for Proposals "*Increasing the development of new products and services that derives from R&D activities*" (ref.: KK.01.2.1.01.) which is approved for funding under the Grant Agreement number: KK.01.2.1.01.0055 implemented by the Croatian Small Business, Innovation and Investment Agency; HAMAG BICRO and the Ministry of Economy, Entrepreneurship and Crafts.

The project is co-financed by the European Regional Development Fund under the Operational Program Competitiveness and Cohesion 2014 - 2020.

The project involves industrial research and experimental development of the inITS system within the priority area of Transport and Mobility, a sub thematic priority area Ecologically Acceptable Transport Solutions, i.e. Intelligent Transport Systems and Logistics. The inITS system is future traffic solution software that will change the approach and trend of traffic science and transportation technology of people and goods.

The total value of the project is HRK 13.258.569,35 eligible costs amount to HRK 12.634.149,03 and the expected aid is HRK 7.485.289,00. The estimated duration of the project is 48 months.

2. TECHNICAL DESCRIPTION

The subject-matter of procurement: The purchase of programming services.

Procurement number: 09/2020

Group 2: Programming services for inITS microservice

Each described below iteration of development shell include research and solution analysis, development and testing.

2.1. INTRODUCTION

This document defines the micro service specification for customer application that the vendor needs to develop in cordova-framework7 technology.

Microservices:

- Customer app – desktop screen
- Customer app – payment types
- Customer app – favorites
- Customer app – address menu
- Customer app – Terms and conditions/Legal

- Customer app – vehicle/transportation types
- Customer app – routes and prices
- Customer app – vehicle position display and trip status display
- Customer app – trip rating

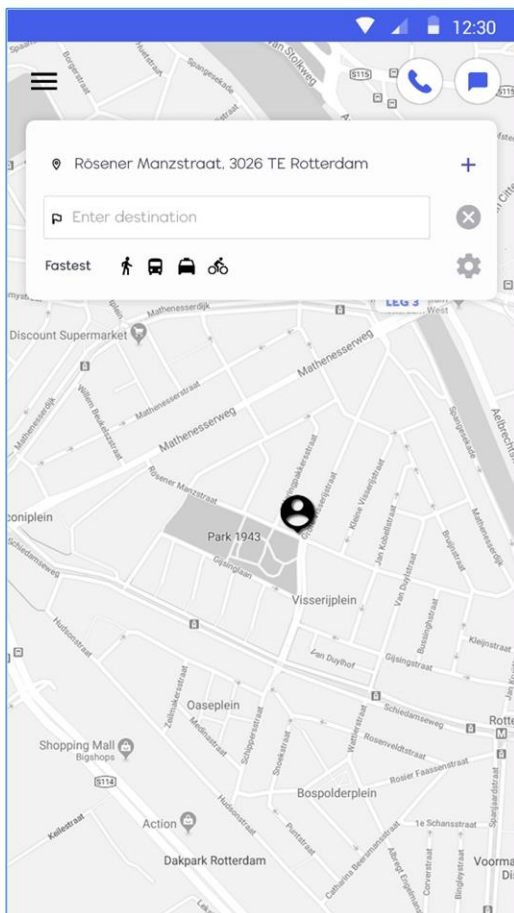
2.2. MIKROSERVICES

2.2.1 CUSTOMER APP – DESKTOP SCREEN

The home screen must have a digitized map (Open Street Map) with positions at users' locations or, if they do not exist, at the positions of organizations.

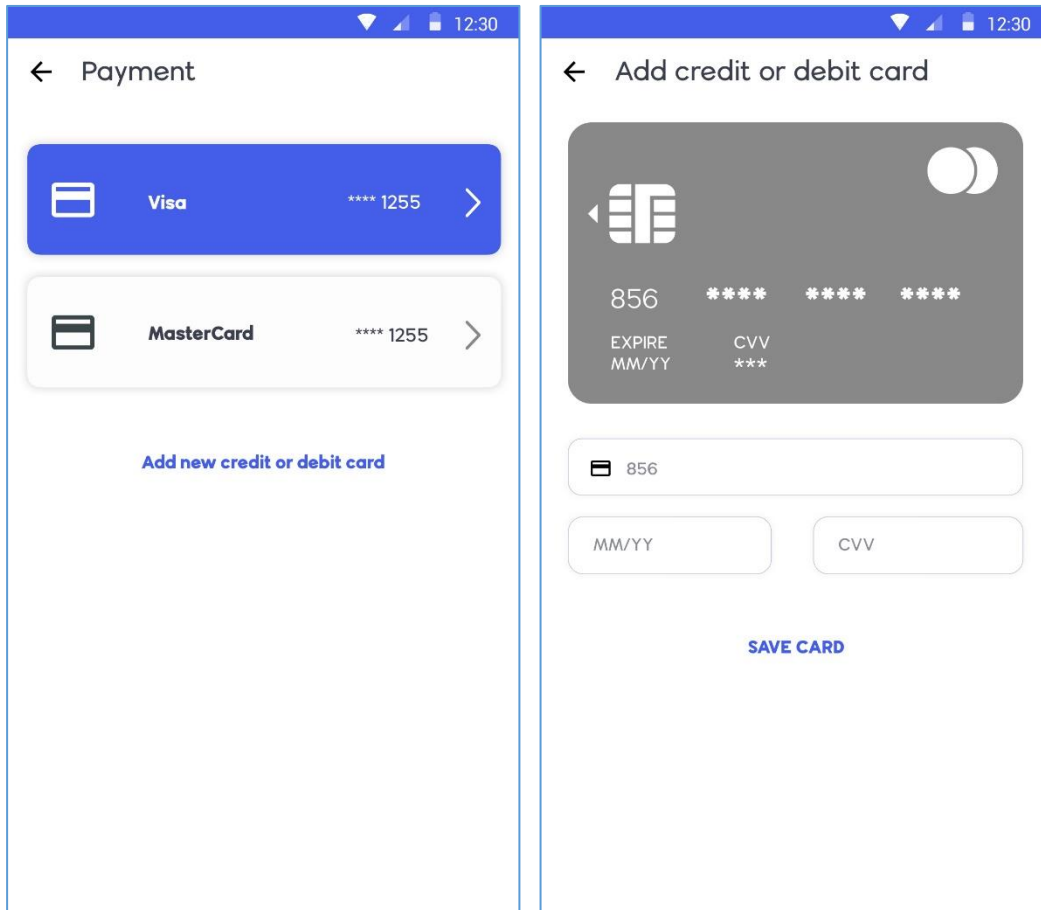
There must be a destination input field in the first part of the screen. Clicking on the field opens a menu where you need to enter the address via a digitized map or by entering via the keyboard. Also, in the same choice we had the last address selected as a guess and a list of favorites.

Design example:



2.2.2 CUSTOMER APP – PAYMENT TYPES

The payment method must be selectable in the application. Two payment methods should be available: 1) cash and 2) in-app credit card.



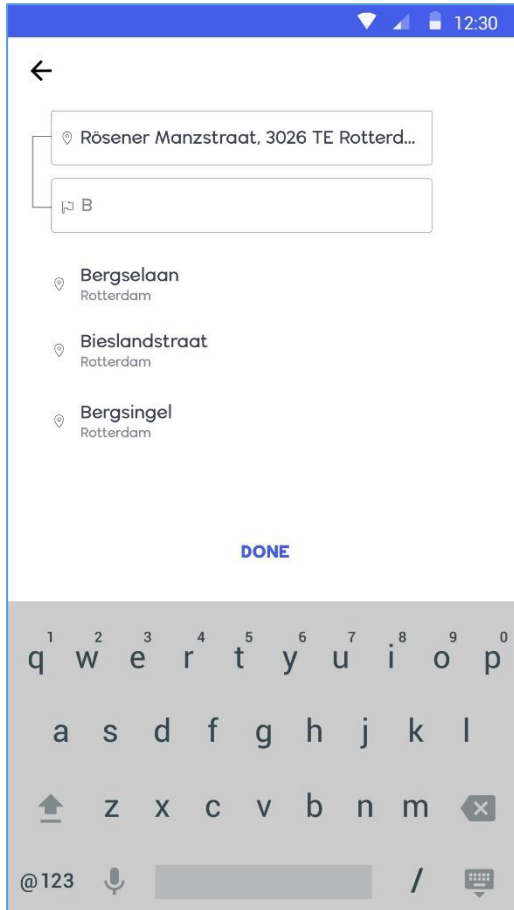
2.2.3 CUSTOMER APP – FAVORITES

Add, edit, and delete favourites. Favourites are entered via a digitized map or by entering a text field. Each favourite has a name, coordinates (position in space) and an address (optional).

Favourites are displayed in the address selection window below the last used addresses.

2.2.4 CUSTOMER APP – ADDRESS MENU

Addresses are selected on a digitized map (drag and drop) or text input. The address entry screen is accessed by clicking on the entry on the main screen. For text input, enable autocomplete whose results are returned by the server. Take response format from Google.



2.2.5 CUSTOMER APP – TERMS AND CONDITIONS/LEGAL

Terms of use must be withdrawn from the server (URL will be defined through administration). Terms of use are loaded when the application is opened and can be accessed in the application menu.

Terms of use are loaded in the selected language of the phone as the language is sent in the request to the server. The server takes care of the text language of the terms themselves and returns them to the application.

2.2.6 CUSTOMER APP – VEHICLE/TRANSPORTATION TYPES

The types of transportation depend on the route itself and the organization using the application. The organization is administered on the server, and transport type information is obtained when you pull the configuration when you open the application.

The selection looks like this:

The screenshot shows a mobile application interface for 'Preferences'. At the top, there's a blue header bar with a back arrow, the title 'Preferences', and status icons (Wi-Fi, signal, battery) along with the time '12:30'. Below the header, the section 'TRANSPORTATION TYPES' is displayed. It contains a list of transportation modes, each with a checkbox and a corresponding icon to its right. The checked items are TAXI (taxi icon), BUS (bus icon), WALKING (walking person icon), and BIKE (bicycle icon). The unchecked items are TRAM (tram icon), OWN BIKE (bicycle icon), TRAIN (train icon), METRO (metro icon), OWN VEHICLE (car icon), and FERRY (ferry icon). Below this section, there's a 'TYPES' section with three radio button options: 'Fastest' (selected), 'ECO', and 'Cheapest'. At the bottom of the screen, there is a blue button labeled 'SAVE PREFERENCES'.

Transportation Type	Selected	Icon
TAXI	Yes	Taxi
BUS	Yes	Bus
TRAM	No	Tram
WALKING	Yes	Walking
BIKE	Yes	Bike
OWN BIKE	No	Bike
TRAIN	No	Train
METRO	No	Metro
OWN VEHICLE	No	Car
FERRY	No	Ferry

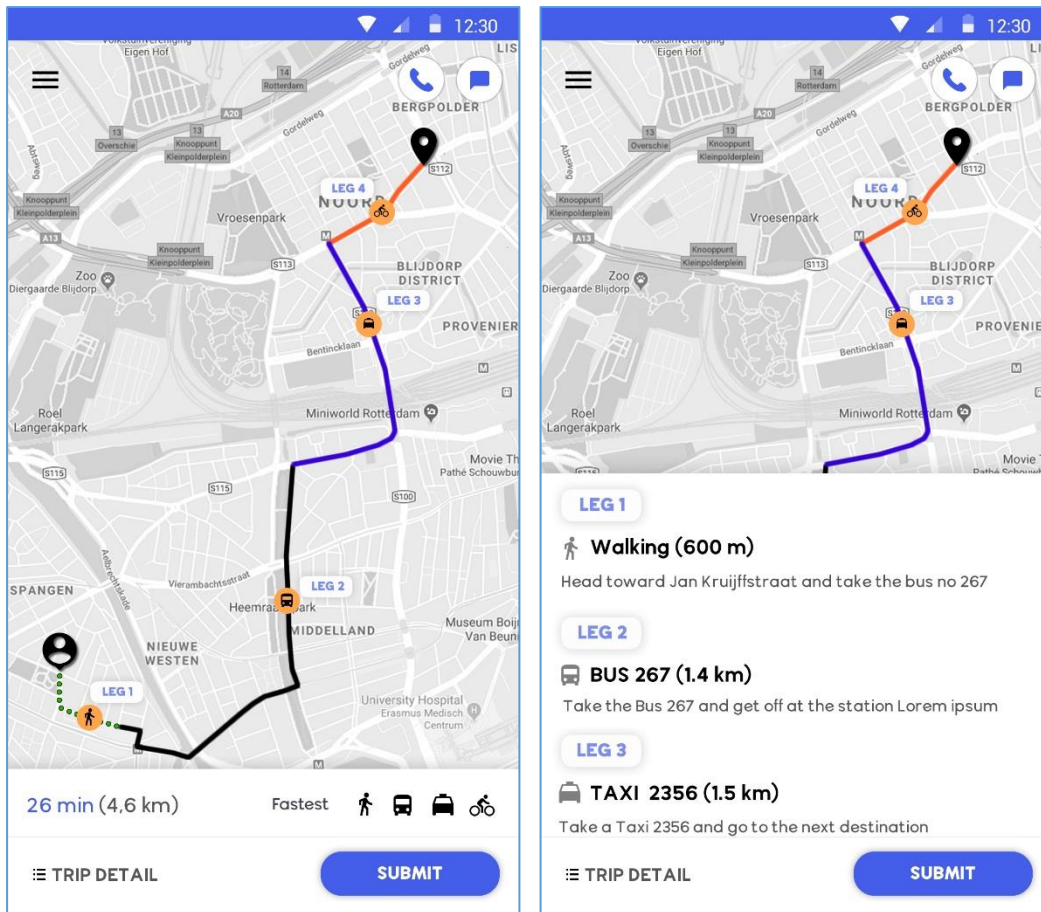
TYPES

- ☒ Fastest
- ☐ ECO
- ☐ Cheapest

SAVE PREFERENCES

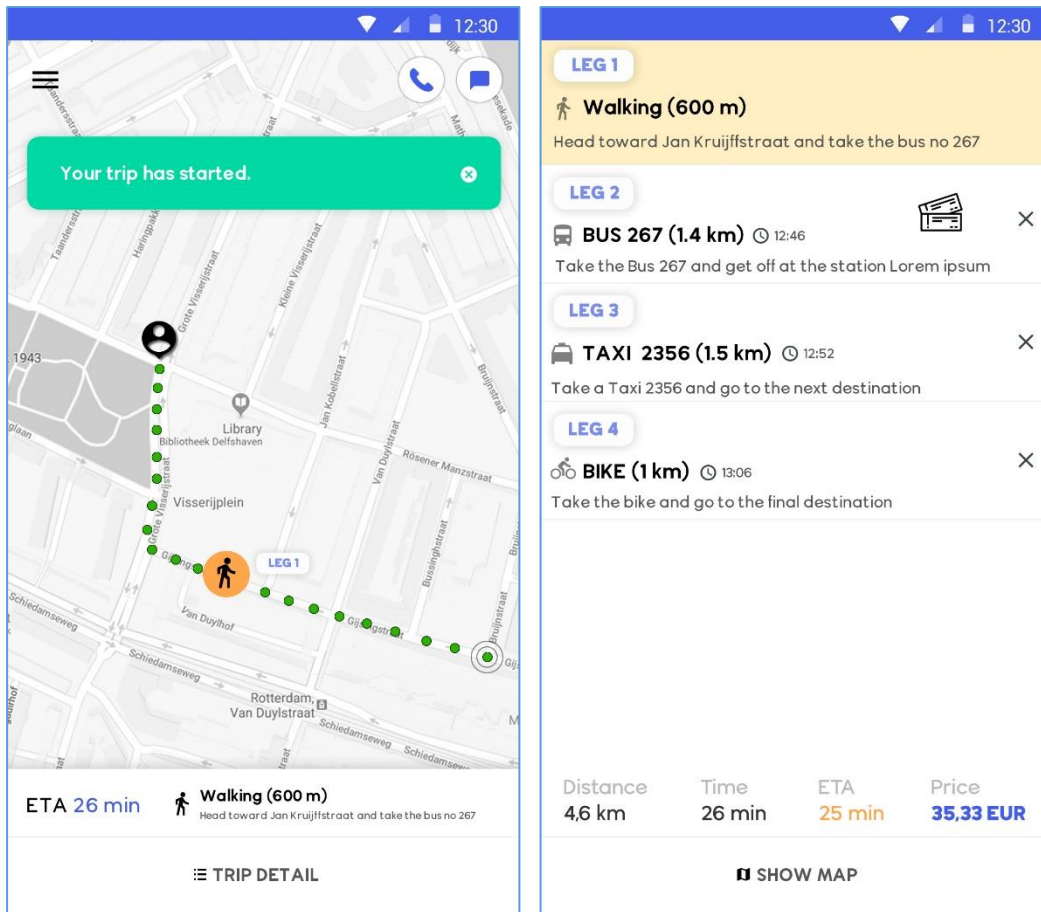
2.2.7 CUSTOMER APP – ROUTES AND PRICES

Once the addresses and transport types are entered, the system uses a server component that calculates the optimal route, which is then plotted on a digitized map.



2.2.8 CUSTOMER APP – VEHICLE POSITION DISPLAY AND TRIP STATUS DISPLAY

When the order is accepted by the server and when the execution of the order has started, the user should see through the application the position of the next step and the position of the vehicle used.



2.2.9 CUSTOMER APP – RATING

The purpose of this service is to evaluate the service at the end of the order. The ratings are from 1 to 5. The rating is propagated to the server through the service: rateTrip (var rating).

Ratings serve as a measure of service quality.

3. TENDER

Tenderer confirms that he offers the required services described in item 2. TECHNICAL DESCRIPTION OF THE Annex IV – Technical description for Group 2, by submitting signed and certified Annex IV – Technical description for Group 2.

FOR TENDERER:

At _____, on _____

LS _____

*(first name, last name, title and signature of
authorized person)*