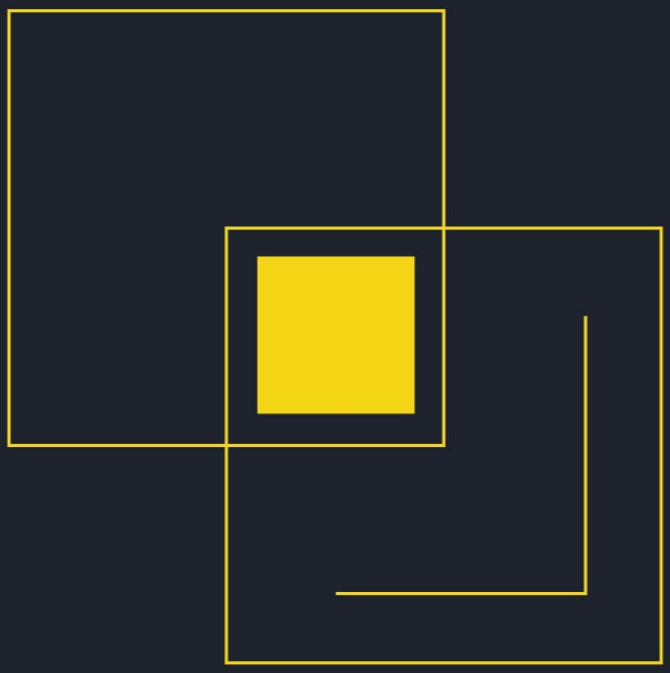


CASE STUDY

KIDS DELIVERY APP

Trackschoolbus

February 2017- March 2017

redbytes™
Appify Your Business

TrackSchoolBus: School Bus Tracking Company in Trivandrum, India
Time Period: February 2017- March 2017

Domain

A tracking software development company focused on making transportation safe and easier for students while also helping schools to run their fleet of vehicles efficiently with the help of web and mobile solutions.

Why Mobile App Development?

The huge popularity of smartphones makes mobile apps an easy choice. It provides advantages such as anytime, anywhere access and faster response rate than web browsing. Creating an end to end app for safe transportation can help TrackSchoolBus reach out directly to customers effectively.

Objective

To create an app that will enable parents to book and pay private cab services easily. To understand client needs and explore how they could work more efficiently for a mobile app that covers the functionality of solutions for a safe transportation app.

Challenge

While formulating the application, back-end system and infrastructure showed to play the major role in the final offered product. Specifically, the following areas were identified as potential back-end challenges:

- Developing the app in multiple platforms
- Integrating payments when trips are created
- Developing a billing and settlement process for trip amount calculation
- Tracking the location of the child on real-time
- Creating separate trips- Instant trips / Subscribed trips

Strategy

Get a clear picture of the requirement; follow an agile model of development and testing with constant client interactions for both iOS and Android, look for client feedback, make necessary changes, test and deploy.

What We Did?

Redbytes designed, developed and deployed an end-to-end mobile application which includes services like- mobile application development, integration to back-end systems through APIs and mobile testing.

Kids Delivery App is a smart app that makes it seamless to follow-up and monitor the travel locations of your child through a cab service. Users can ensure the safety and convenience of your child's trip details during a private transport by using this app. It's a real time travel companion with accurate re-al-time predictions.

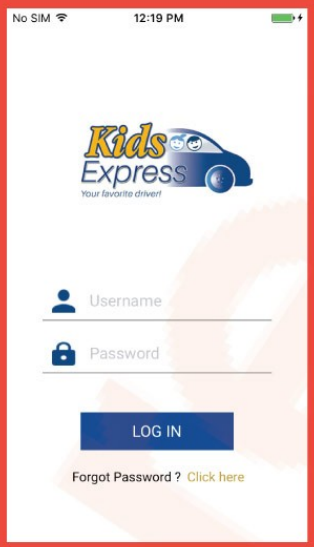
By registering with this app, cab owners, parents, tutors, coach etc. can use the app. Once the registration is approved from by the admin, trips can be created by the registered users. Here trips can be created for a single day or for selected days as per preferences.

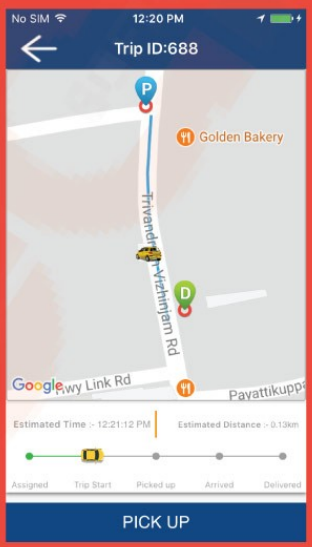
The entire process of development included 3 divisions:

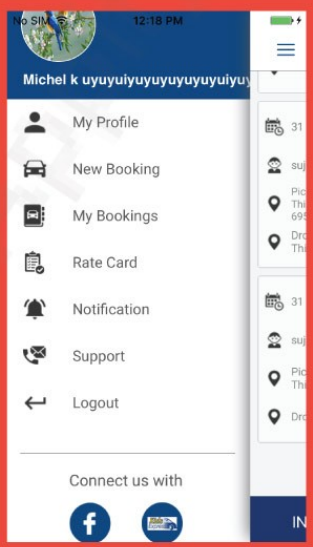
Design

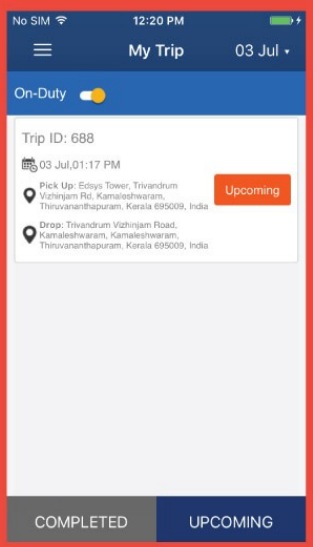
We made the design simple, clear, meaningful and have used a consistent model that is apparent and recognizable to users. The structural principle of the app is concerned with overall user interface architecture. Finally, to observe the real insights of the design, user testing was done by our testers.

App Screenshots









Application Part

This is a cross-platform mobile app that works with both Android and iOS. The basic approach to get an app done includes the step of building everything at once i.e. the back end, website and the application part. This approach has helped us to make the app work in both platforms where procedure for development is almost the same.

In iOS: An extension of C language, Objective C is used to write the frameworks of the app. X-code is used as the integrated development environment(IDE) which is considered as one of the best platform to built apps for iOS and Mac.

In Android: Here, Android Studio is used as the integrated development environment (IDE) which is officially supported by Google. By using this, the app development process becomes more convenient for our developers for working with different devices like smart phones, tablets etc. This consists of programming language Java which is concurrent, class-based and object-oriented.

The steps of development included:

1. Creating a new project for app development
2. Setting a bundle id and name of the app
3. Certificates are created to upload the app to the app store
4. Design part of the app is done and then coding starts for the corresponding sections. This step is repeated until the procedure is completed
5. Once development is completed, the app build is send to our testers for testing

Web Part

Web part which is a server side control that runs directly with the server, uses PHP as the scripting language. Yii2 is the component based framework used within this project.

Dashboard of the app is created using the Node.js which is a platform built on the Java script runtime. The use of Node.js makes our app building faster and scalable with higher speed in reduced loading time.

In web part, a registered user can create trips with automated amount calculations. This might vary for instant and subscribed trips. Creating the trip includes pick-up location details, destination location, date of trip, repeat(if needed). This trip remains in the pending mode until admin accepts the new request. Once the admin confirms the request, driver is assigned for the trip.

Testing

Finally, a set of automated tests are performed by our testers to make surethat the app works correctly, before it is published. Automated testing methods like unit testing, integration testing and regression testing are done.

Before running the tested application, codes are tested with debugging tools to analyse and track possible errors if any.

Investment

This project was a combined effort of our skill-full team with impeccable knowledge that included a project head, designers, android and iOS developers and testers. It took almost 2 months for completing the entire app project.

Achievement

The web and mobile applications of the Kids Delivery App developed by Redbytes was a success and received an overwhelming response from the client. The client was happy in achieving their motive of rendering a simple, user-friendly and tech-enabled app for their customers for safe transportation of children.