

GoBike is smart bike rental system in Copenhagen, Barcelona, Utrecht, Frederiksberg and Stavanger.

Challenge

The challenge here was that client came to us with the idea only. They wanted to develop bike rental system that had no similar solutions on the market. So we had to design scalable architecture from scratch.

Time to market was also critical.

Solution

Bikes are equipped with Integrated Tablet PC. The onboard tablet with built-in GPS allows the user to plot routes around town and check travel bookings, while regularly reporting back to Gobike Backend. Backend allows help desk to monitor the system, track where the bike is, quickly resolve any issues and help users to use the system. Elastic price management system allows admins easily create custom price plans, products, etc.

Daily, Weekly, Monthly, Yearly subscription plans, define custom products (for example dock/undock, parking, etc), override prices based on day (for example lower the prices on national holidays). Accountant tools to track your cash flow that are integrated with the payment provider.

Redistribution system helps to identify docking stations with a high or low amount of bikes so that personnel can easily build their route to manually collect and redistribute bikes. Automatic repair system allows admins to block bike from being booked or taken out of the system while the bike is waiting to be picked up for repairment.

Tools and technologies

- ASP. NET MVC
- SQL
- Entity Framework Code First
- Memcached
- Android
- HTML/CSS/JavaScript
- Altapay
- Google Maps
- AutoMapper
- StructureMap
- jQuery
- Bootstrap

Scope of work

- Decision on technical stack
- Integration with payment system
- Architecture engineering
- User interface/User experience (UI/UX) design
- Front-end/back-end development
- Requirements elaboration
- Quality assurance
- Participation in product management
- Mobile app development

Results

- Go live in 3 months with the team of 3 members
- Fully implemented solution that is now more than 2 years in production
- More than 200K users
- More than 1.5M trips

