

## Case Study: Online Smart Parking Space (SmartParking: Online)

The SmartParking is company located at Duy Tan street that offers modern spaces for drivers to park their vehicles for a fee. Vehicles typically include cars and motor bikes. The company owners want to expand the operation and have a new online presence, where the customers can typically browse the parking space for availability, prebook the parking slots, and more conveniently pay for them.

SmartParking currently only requires drivers to physically find and pay for their parkings at the time of their arrivals. However, this creates a problem of long waiting queue at peak hours that prevent some drivers from successfully parking their vehicles on time. Further, drivers at the end of a queue would eventually be turned away because there are no slots left. The owners have decided to improve operation and at the same time to reach a broader customer base coming to the central districts by providing an **online Smart Parking Space (OSPS)**.

Having researched online booking services of a similar scale, the owners devised an initial set of ideas on what processes they would like to have covered with the new OSPS. In particular, the new OSPS shall support creating customer accounts, browsing parking slots for information and availability (which is updated in real-time), reserving and booking a parking slot per hours, managing the booked slots, creating invoices and receipts for customers, handling payments, parking guidance. In order to get a better overview of the operation, the new OSPS shall also support basic statistics about the booked parking slots over various periods (a day, a week, a month, a year, or year to date) etc. The owners also want to be able to update the locations, types of vehicles supported and types of slot available for booking as new facilities become available.

Other booking services have incorporated further features into their systems (e.g., long-time booking, discounts, loyalty programs etc). The owners of SmartParking, however, decided not to consider any of these features for now, but this may be an option in the future.

In order to facilitate a tender process, the owners of SmartParking are now faced with the task of writing up a more detailed specification that clearly states the goals and requirements for the online store to be developed.

Note: This project is relatively small and well-defined, yet may have several surprises.