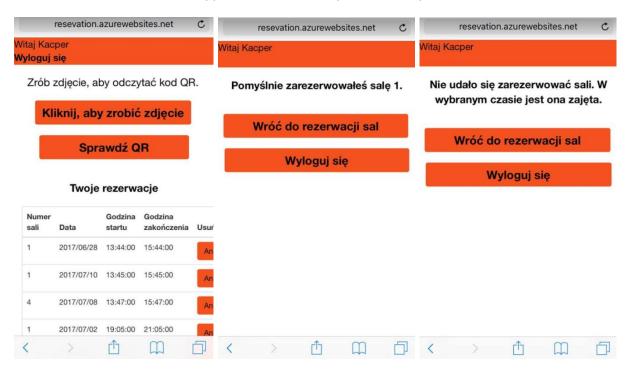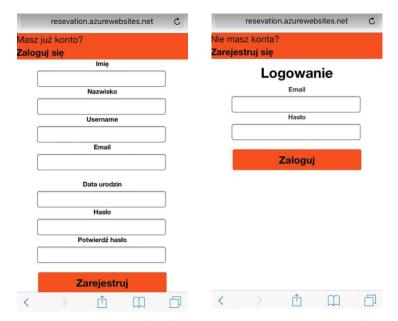The purpose of this app is booking rooms via QR codes. I coded it in ASP.NET MVC.

The user must takes a photo of the code which is (for example) hanging on a door of a room (The application is designed for mobile devices). When the code is read correctly the application goes to the completed form. When the code is not properly read the field containing the room number is empty. By default the form is filled with the current hour. You can change the data in form inputs. When the user clicks on the accept button he is redirected to a view which informs about success (or failure) of the reservation. The application also allows you to cancel your room reservation.

User must be registered in the database and logged in to reserve the room. To sign up, you must fill the appropriate form and then confirm the registration by clicking the appropriate link which is sent to the email you provided. This application has been published at resevation.azurewebsites.net

To read the QR codes I used a special package that contains necessary functions to decode the image (QR Code library).

The biggest problem was reading the picture sent from the phone's camera. The size of the photo was too big (about 4mb) to decode it which made the decoder throw an exception. This problem was solved by using a special extension for working with images (Magick) which reduced the size of the image and allowed reading the data stored in the QR code.

The application has an admin panel. Administrators can view booked rooms, users and rooms. They can delete or add reservations, remove users and remove or add new rooms.

There are two types of user roles in the application. You may be an administrator or a user. An ordinary user can reserve rooms (he does not have access to the admin panel). The administrator can book rooms and do what was written in the previous paragraph.

The current version of the application is not perfected yet. It doesn't handle all the bugs, and doesn't inform the user which rooms are currently free or which are busy. I want to fix it in the near future. I also want to add:

- reservation limit for a single user,
- special calendar to inform which rooms are available at the time.