

Topic

Internet based travel system for diabetics

Customer

SCIARC GmbH

They develop e-Health solutions for the healthcare sector.

Their customers are scientific organizations, pharmaceutical industries, health insurers and medical internet portals.

Task

Diabetics travelling long-distance face the problem that their insulin-intake rhythm is completely disturbed due to time zone changes. Therefore, a software program should be developed that calculates an adjusted intake scheme over the transition time based on the patient's intake habits, the travel dates and locations. This system should be made available to an authorized user group via the internet.

Implementation

PIKON supported the over-all project from the design-phase, system implementation, and hosting procedure.

The algorithm for determining the revised intake scheme is based on the time shift (automatically calculated based on the departure and arrival airport, and the flight times), the medication currently taken by the patient, and their "usual" intake scheme. The calculation of the time difference presented a particular challenge, since it required the installation of a comprehensive database covering airports worldwide and their respective time zones.

The project was implemented using Java technology. The dynamic web components were translated using JavaServer Pages (JSP). All data, as well as the control algorithm, were stored in a database.