Intuitive mobile application helps Oslo’s Department of Environmental Affairs and Transportation better understand how the city is experienced by its youngest pedestrians

The Situation

Young pedestrians are, generally, the most vulnerable of all road-users. According to a recent report released by the European Commission, 29% of children under the age of 12 are pedestrians. Of all traffic fatalities across the EU, the proportion of pedestrian fatalities is about 17%. Unfortunately, young pedestrians below 12 years of age make for a large number of them. Town planning authorities across the continent are hence pressured to prioritize investments in road safety.

The situation in Oslo was no different. In its quest to ensure safer roads for its youngest beneficiaries, the city’s Department of Environmental Affairs and Transportation, together with the The Institute of Transport Economics, sought to gain actionable insights into their navigation experience. This would help the Department better manage the traffic network or invest in purpose-built infrastructure such as sidewalks. It was, however, challenged to gain reliable input from a meaningfully large percentage of school-going children.

The Solution

The Department identified a solution in the form of a mobile application that could crowdsourced information from children. The application had to be robust enough to accommodate a large number of users feeding multiple data points – perceived dangers along their route to school, for instance. The next challenge was to build an interface that was clear, simple, and user-friendly enough to be operated by third-seventh graders.

"Getting actionable insights from kids was challenging. But, Capgemini’s user-friendly mobile app helped us achieve the outcome of getting relevant inputs from Grade-3 students."

Vibeke F. Rørholt - Bymiljeetaten,
Project Manager, Agency for Urban Environment, City of Oslo

Capgemini Supports City of Oslo’s Drive to Improve Road Safety for its Youngest Pedestrians

People matter, results count.
City of Oslo entrusted Capgemini with the design and development of this unique application, aimed at improving road safety of its young pedestrians. Mobile Solutions is a global service line within Capgemini, comprising over 4,000 experts across the world, helping hundreds of clients in a wide range of areas – from solution design to testing. Capgemini Mobile Solutions draws from its Design & Experience talent network and the Group’s Mobile Factory, which works with organizations to accelerate the delivery of mobile apps, websites, and Internet-of-Things solutions. The Design & Experience approach reduces time from innovation to delivery by addressing both rapid prototyping and critical solution design. It puts user experience and user interface requirements at the heart of the development process, ensuring consistency in design, functionality, integration, and security.

Leveraging its Rapid Prototyping Methodology, Capgemini was able to deliver an iOS prototype of the application within two weeks. The application not only exceeded the Department’s expectation, it was also welcomed by its target audience. Grade-3 students were able to seamlessly navigate through its interface without any assistance, validating Capgemini’s focus on functional simplicity in user-experience.

The Result

Capgemini’s Mobile Solutions team built a prototype iPhone app using reusable templates and generic buttons, and then let the children play with it. The result was an app that went into trial with students at the Ullevål and Korsvoll schools in Oslo. Students were asked to log on with a unique identification code and provide traffic inputs. Additionally, they could choose between nine categories, including fast-moving traffic or heavy traffic on a particular route shown on the app.

To get a bigger picture, more than 43,000 primary school students will soon use the app to provide information on dangerous road intersections and other traffic problems.

How Capgemini and City of Oslo Worked together

Key to the success of the project was Capgemini’s rapid prototyping methodology – it enabled a test sample of users, third-seventh graders, to experience the application quickly. The methodology also involved the Department, end users, and developers from the word go, ensuring an agile, open approach. The Capgemini Mobile Solutions team interacted extensively with young pedestrians to understand their expectations from such applications. The user-experience experts acted as a connecting link between developers, the Department’s officials, and process-oriented architects. They added the cognitive parts that seamlessly captured the requirements of all stakeholders.

“Capgemini’s collaborative approach and Rapid Prototyping Methodology enabled delivery of an iOS prototype within just two weeks. The functional simplicity of the app’s interface was validated by the ability of Grade-3 students to use it effectively”

Vibeke F. Rørholt - Bymiljøetaten, Project Manager, Agency for Urban Environment, City of Oslo

For more information on this project, please contact: success.story@capgemini.com

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