Designing Mobile Application to Motivate Young People to Visit Cultural Heritage Sites

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Abstract: This paper presents a mobile phone application developed for sightseeing in Nikko, one of the cultural world heritages in Japan, using the BLE (Bluetooth Low Energy) beacon. Based on our pre-research, we decided to design our application for young people who walk around the area actively, but know little about the tradition and culture of Nikko. One solution is to construct many information boards to explain; however, it is difficult to construct new guide plates in cultural world heritage sites. The smartphone is a good solution to send such information to such visitors. This application was designed using a combination of the smartphone and beacons, set in the area, so that when a tourist passes near a beacon, the application displays information about the area including a map, historical or cultural information about the temples and shrines, and local shops nearby as well as a bus timetable. It is useful for foreigners, too. In addition, we developed quizzes relating to the culture and tradition of Nikko to provide information based on the Zeigarnik effect, a psychological effect. According to the results of our trials, tourists positively evaluated the basic information and young people who used the quiz function were able to learn the historical and cultural points. This application helped young visitors at Nikko to understand the cultural elements of the site. In addition, this application has a function to send notifications. This function is designed to provide information about the local community such as shops, local transportation companies and information office. The application hopes to also encourage people living in the area, and such cooperation from the local people will make this application vivid and inspire young visitors to feel that the cultural heritage site is still alive today. This is a gateway for young people to learn about a traditional place and understand the gravity of preserving such areas.

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