



# An Android App for HKUST Info

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# Introduction

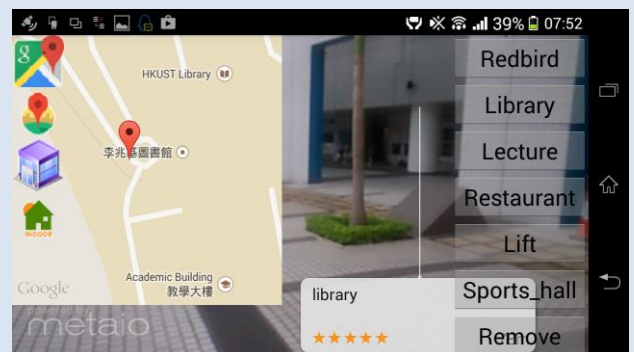
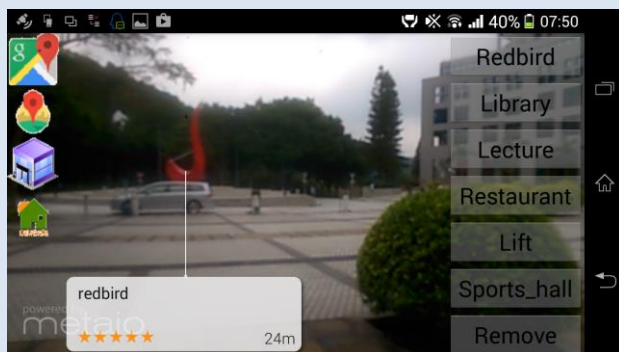
We have developed an Android mobile application for users to locate places in the outdoor and indoor environment and discover interesting information of HKUST.

## Features

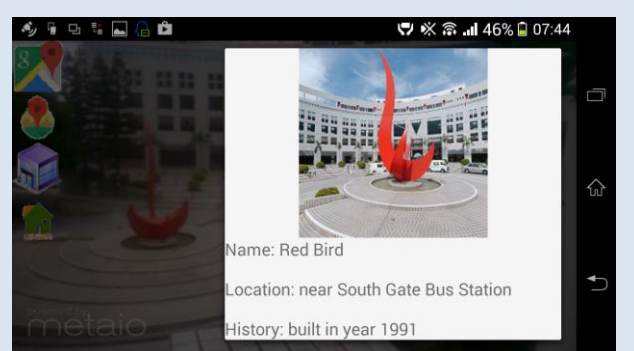
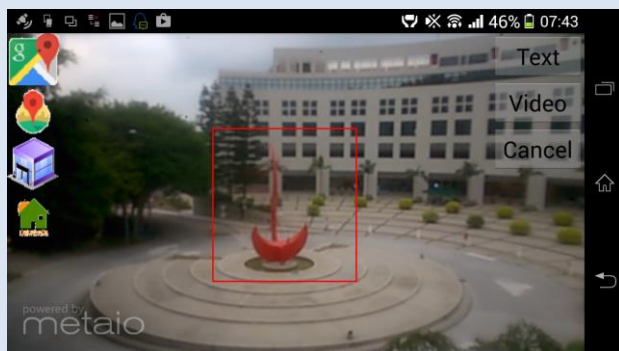
In the outdoor environment, our application provides a location tracking function and outdoor objection recognition function to locate the places. For location tracking function, our application can locate the building using the geo-location data. And then it shows some related information of the building, such as the relative distance between the building and user. Also we utilize the data from the mobile embedded orientation sensor to show the buildings with orientation. Also we provide a built-in Google map to help locate the buildings at HKUST. For outdoor object recognition function, we combine the geo-location data and image data to provide an

object recognition algorithm to locate the buildings at HKUST. After recognition, related information about the building such as the history or introduction will be displayed on the screen.

### Outdoor location based tracking:



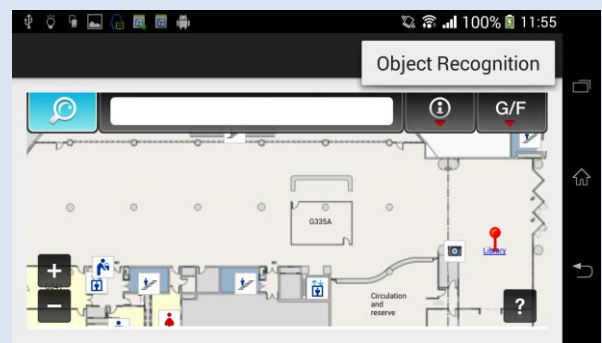
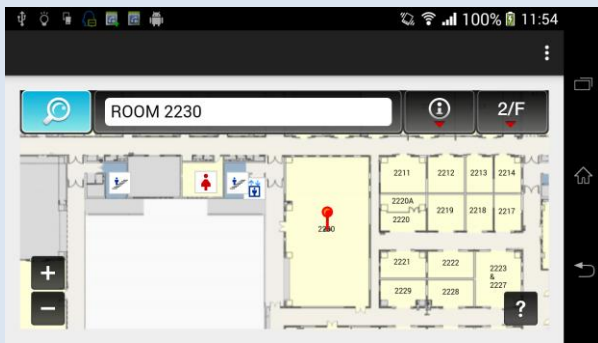
### Outdoor object recognition:



In the indoor environment, our application provides the indoor floor maps of buildings at HKUST and indoor object localization to locate the offices, rooms, toilets and other objects inside the buildings. For indoor floor maps at HKUST, user can type the name of location such as the room number or the lift

number, and then the application can show the floor map where the room or the lift is. Therefore, users can locate the places inside a building conveniently. For the indoor object recognition function, the user can detect the indoor objects and then associated information of the objects or buildings will be displayed.

### Indoor building maps:



### Indoor object recognition:

