

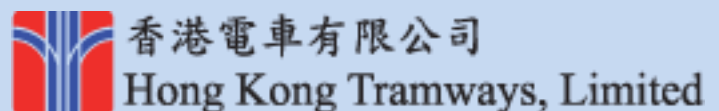
Hong Kong Traffic Guide Android App

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Overview

- ✧ In recent years, the smartphone market has been growing rapidly in Hong Kong. Most people use their smartphone every day to perform different kind of jobs such as gaming, social networking and searching for information they need. People rely on their smartphones and expect them to solve their daily life problems in a convenient, effective way.
 - ✧ One daily life problem people face every day is transportation. People want to know effect paths to get to their destination. This is especially for tourist, who are usually not familiar with Hong Kong streets and the Hong Kong transportation system.
 - ✧ In our final year project, we are going to create a smart phone application which gathers all major transportation information in Hong Kong and computes the shortest, cheapest and most efficient paths to destinations in a fast, effective manner
- 1
- ✧ Transportation information included: Bus, Green mini bus, ferry, tram, and peak tram



Implementation

Search function:

- ✧ The input is the route number and suggestions are provided. The result will be the route number and the company name. It ensure different transport provided by different company but have the same route number can be distinguish. User can choose from the result to get the full stop location information in forward or backward form

The A to B search function

- ✧ For the A to B search function, the input are starting point location name and ending point location name. The default path is the effective path. It no effective path was found, it will suggest a shortest path with interchange location.

The most efficient path

- ✧ Most efficient path is the path that do not need to make any interchange between different kinds of transport (i.e. a direct route).

The image displays two screenshots of the HongKongTrafficGuide application interface.

Left Screenshot (RoutelInfo):

- Header: HongKongTrafficGuide | RoutelInfo
- Search Input: 91 | Search
- Route Info: 91M: 鑽石山站 -> 寶林
- Results List:
 - 91 (KMB): 香港科技大學(北)
 - 914 (KMB+NWFB): 大埔仔村
 - 914X (KMB+NWFB): 銀影路
 - 91M (KMB): 水邊村
 - 91 (NWFB): 半見村
 - 91 (NWFB): 明德邨
 - 91 (NWFB): 厚德商場
 - 91A (NWFB): 培成路
 - 91A (NWFB): 厚德邨
 - 91A (NWFB): 景林邨
- Bottom Navigation: SEARCH | A TO B SEARCH | FORWARD | BACKWARD

Right Screenshot (A to B Search):

- Header: HongKongTrafficGuide
- Search Input: 科技大學
- Destination Input: 坑口
- Search Button: Search
- Results List:
 - 91 (KMB)
 - 792M (NWFB)
 - 11M (GMB)
- Bottom Navigation: SEARCH | A TO B SEARCH

Conclusions

The goal of this project is try to develop a transportation guide Android app.

Function included:

✧ Browse transportation information

Show the detail of difference transportation information like stops, full fares, route number, start location and stop location.

✧ Search by route number

Show the detail information of a specific route

✧ A to B Search

Suggest routes from A to B including direct route and not direct route.

We have learned much through the project. We were challenged by the complexity of the development tools needed to build this system. None of us had experience with Android apps development before the project. We needed to learn different concepts and techniques quickly and apply them during development process. The project also provided a chance for us to accumulate experience in SQLite. This project experience has greatly enriched our knowledge and sharpened our technical skills.