

Travel Assistant Device

Researchers at the University of South Florida have developed a real-time public transit navigation system which tracks the location of transit riders and transit vehicles, and provides notifications to the transit riders based on location of the riders and the vehicles.

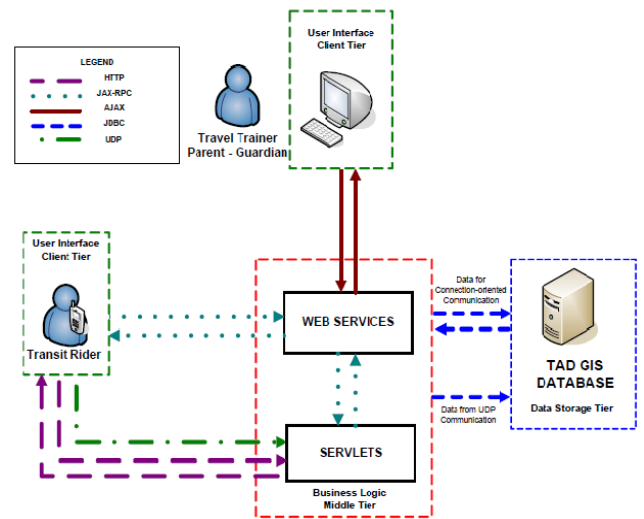
Today, users often employ mobile devices for mapping and navigation services. Smart phones and tablet computers have become nearly ubiquitous, and contain greater computing power, speed, connectivity and mobility than much larger computers did just a few years ago. Therefore, a technology that allows users to navigate unfamiliar public transit routes in real-time using mobile devices would have tremendous value, and could potentially become a standard application in a short amount of time.

Inventors at USF have developed such a system. With knowledge of a riders intended destination, a mobile phone can be used to determine the riders real-time location (e.g., using GPS), and give the rider notifications during their use of the public transit system. The system is useful for assisting riders, business travelers, or tourists to destinations using unfamiliar routes, or introducing new riders to a public transit system. This innovation promotes the use of public transportation in order to lessen traffic congestion, reduce consumer travel costs such as fuel, and reduce environmental pollution. Cognitively disabled users can also benefit from the specific guidance in their daily travels and, if appropriate, the user's location can be monitored remotely by a family member or caregiver.

ADVANTAGES:

- Provides destination alert to user
- Remote monitoring of a rider by a family member or caregiver
- Aids navigation of cognitively disabled
- Reduces costs to transit operators

System Guides Transit Users Along Unfamiliar Routes Using Mobile Phones



Travel Assistant Device System Architecture

Tech ID # 05A060

Patent #: [8,138,907/8,169,342](#)

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