ABSTRACT:

With the increase in popularity of mobile technology, users can access location-aware information from virtually anywhere. Using assistive technologies, this allows people with disabilities to live more independently than ever before. For example, as people with visual impairments can not usually read the timetables posted at bus stops, a mobile application can leverage GPS and public transit information to reveal schedule and route information in more accessible formats, based on an estimate of the user's current location. This paper presents our prototype for this application, ABLE (Accessible Bussing through Location Estimation) Transit, and compares it with existing efforts in the domain of accessibility. We further identify the tradeoffs of Web versus native applications when developing assistive technology.