# CS 477a Project Proposal: Mobile Transit Passes

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### 1 Proposed Project Name

Project RAP (Rapid Access Pass)

## 2 Organisation Name

Mobile Ticketing Technologies

## 3 Project Goals

- 1. To create new and innovative transport technologies
- 2. To improve the efficiency of purchasing public transport tickets
- 3. To reduce the barriers to public transit systems

## 4 Current Systems

#### 4.1 System Names

The current available systems include  $TAP^1$  and  $Clipper^2$  cards.

#### 4.2 Implementations

Current systems are implemented as tickets on plastic 'smart cards', combined with RFID or NFC technologies.

 $<sup>^1 {\</sup>tt http://www.taptogo.net/}$ 

<sup>2</sup>http://www.clippercard.net/

#### 4.3 Issues

The cards are inconvenient to carry around and not very efficient. Today's technologies are moving towards mobile, which would be more cost-effective for businesses and more attractive to customers.

## 5 Proposed Alternative System

We propose developing an ecosystem of mobile apps and hardware that would support saving of tickets on users' own mobile devices.

#### 5.1 Benefits to clients

- 1. Mobile passes would be more cost-effective for the transit operators as they would not have to bear the cost of manufacturing smart cards.
- 2. Transit operators could easily verify that passengers have paid for rides.
- 3. More convenient to carry around as people have their phone on them most of the time.

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