

## 6 Risk Lists

### 6.1 Technical Risks

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**Risk# 1**(Last week: 1)  
**Weeks Active 7**

**Risk Description** An unsecure platform might be exploited or easily manipulated (e.g. people finding loopholes to avoid fees), which can result in the LA Metro losing profits.

**Mitigation Action Items** Our groups architect will develop a cryptosystem for our application that will be tested until it meets the clients requirements and security standards.

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**Risk# 3**(Last week: 3)  
**Weeks Active 7**

**Risk Description** A technical malfunction of our platform might cause boarding delays for passengers and cause inefficiencies in LA Metro operations.

**Mitigation Action Items** A back-up system will be designed in a later stage of the project. Also, we will advise passengers who are particularly sensitive to delays to have a back-up physical tap card.

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**Risk# 4**(Last week: 4)  
**Weeks Active 7**

**Risk Description** Not enough end users (passengers) might not have phones on iOS and Android systems that are compatible with our app.

**Mitigation Action Items** A feasibility study will be conducted to verify iOS/Android penetration rates within the LA Metro passenger base, and if needed, we can tailor our platform to target only a certain segment of the customer base that has access to the required technology.

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**Risk# 8**(Last week: 8)  
**Weeks Active 7**

**Risk Description** We will be using PhoneGap to implement the mobile application with standard web technologies like HTML/CSS/Javascript which makes the application subject to device-specific mobile browser display discrepancies.

**Mitigation Action Items** Test on a wide variety of devices within iOS/Android space (different iPhone versions and various Android phones) to ensure the application is rendered properly on all screen sizes and OS versions.

## 6.2 Requirement Risks

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**Risk# 2**(Last week: 2)

**Weeks Active** 7

**Risk Description** TAP might not be willing to implement our system or work with our group to test our platform on their systems/hardware.

**Mitigation Action Items** Our project manager is currently in talks with TAP, but we could also do a proof of concept using similar hardware/systems or mock interfaces.

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**Risk# 6**(Last week: 6)

**Weeks Active** 7

**Risk Description** After the platform has been implemented and integrated, the TAP requirements might change, or the technologies being used in relevant processes might change.

**Mitigation Action Items** If we are under a contract/agreement, the team will develop updates/patches that will adapt to new requirements. Otherwise, we will provide a copy of our comprehensive documentation for the software so that necessary changes can be handled in-house.

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**Risk# 5**(Last week: 5)

**Weeks Active** 7

**Risk Description** To get the application fully working and integrated into TAP/LA Metro infrastructure, there will be a large set of evolving requirements. Two semesters might not be enough time to complete the project, especially if there are unexpected risks (e.g. another developer completes the same project before we do, bureaucratic risks, etc.)

**Mitigation Action Items** We will develop a running list of unexpected risks as they come up and develop strategies to approach them. For example, we would explicitly ask TAP for their timeline and ask for an exclusive partnership.

### 6.3 Human Resources Risks

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**Risk# 7**(Last week: 7)

**Weeks Active 7**

**Risk Description** Due to rapid formation of teams without proper analysis of required skill sets needed for this project we may lack the technical skills to complete this project in a professionally acceptable manner.

**Mitigation Action Items** Identify team member skills and project requirements so we can individually prepare ourselves for technologies that we will be implementing next semester.

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**Risk# 9**(Last week: 9)

**Weeks Active 7**

**Risk Description** The statically defined list of team roles may not fit our specific project requirements.

**Mitigation Action Items** Dynamically reassign team roles as the project and its requirements mature. Also the team shall be aware that responsibilities will be very flexible and we may need to step outside the scope of our assigned position

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**Risk# 10**(Last week: 10)

**Weeks Active 7**

**Risk Description** The amount of cooperation needed between our team and TAP may be more than expected which could make this project unfeasible for them.

**Mitigation Action Items** Come up with a plan focused around the idea that TAP should have to do as little as possible. Extensive testing should be done internally before our software can be ready for beta testing with TAP. The goal should be to get it right the first time.

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