

### **MSC IN COMPUTING**

# Project Proposal

A proposal to graduate project in Griffith College



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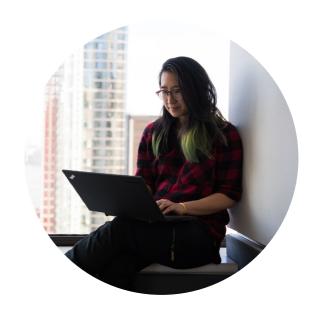


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# Project Overview

Mobility based Smart City Advertising service



## Problem statement

At a time when numerous new ideas and startups are emerging, the market continues to be too expensive to promote as a small business. Also, consumers' interest in traditional promotional methods continues to decline.

## Objectives

Through this project, I would like to open a new era of advertising system by developing LOCATADS, a mobility-based interactive digital advertising system. In this system, I use hypertarget audiences at relevant moments with dynamic content based on data such as location, time of day and weather



# Technologies

## **Frontend**

Framework: Angular

Language: Typescript, HTML, SASS

UX design: Figma

## **Backend**

Framework: Spring Boot

Languages: Java

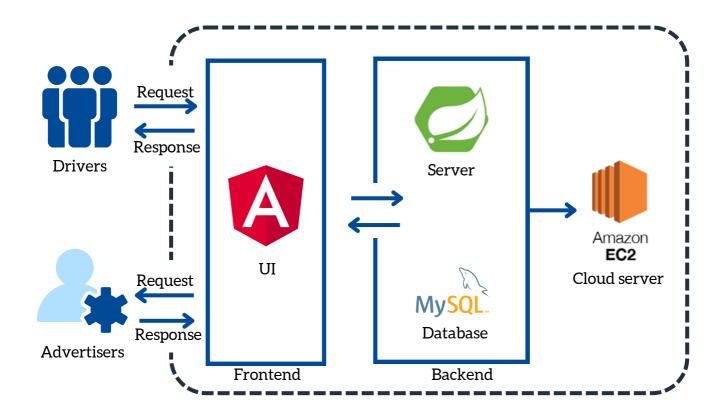
DB: MySQL

## **Deploy**

**AWS** 

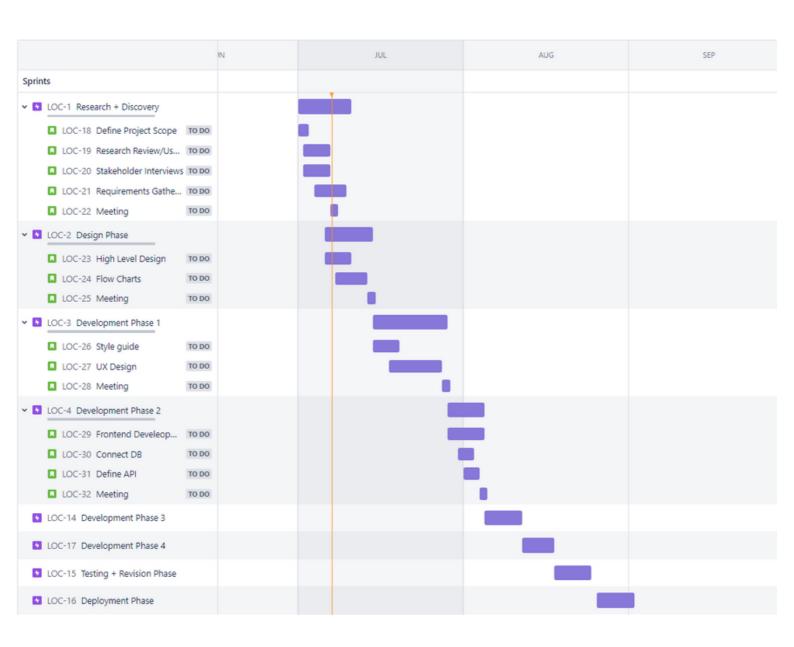


# Architecture / Design





# **Timeline**





## Related works

#### 1. Business

- JCDecaux
- ADOMNI
- Firefly

### **JCDECAUX**

JCDecaux's outdoor ads are largely divided into bus stops, Dublin City Metro formats, innovate, large format, and Luas, all of which are printed advertisements that are traditional advertising. Recently, digital categories have been added to provide digital advertising in the form of panels, poles, shelters, and retails. However, because it offers only a limited number of small numbers, it has not escaped traditional advertising and has not added interactive advertising.

#### **ADOMNI**

A representative advertising company offering "Digital Advertising" in Ireland. It built a self-service online platform that makes advertising on digital out-of-home screens. They have over 600,000 advertising screens and had over 70 billion impressions. However, they still don't apply interactive advertising and have to pay a high advertising fee of around \$35 for just 1,000 impressions. In addition, there is a limit to advertising only in fixed places, not in mobility-based mobility

#### FIREFLY

An advertising company that provides mobility-based interactive Digital out-of-home (DOOH) advertising, founded in California in 2017. Firefly allows moving vehicles, such as taxis, to have screens connected to the Internet to provide advertisements throughout all over the city. However, this technology has **not yet entered Ireland**.



#### 2. Research

- Advertising Methods
  - Tellis, Gerard J. Effective advertising: Understanding when, how, and why advertising works. Sage Publications, 2003.
- Traditional advertising
  - Krugman, Herbert E. "The impact of television advertising: Learning without involvement." Public opinion quarterly 29.3 (1965): 349-356.
- Digital advertising
  - Fuxman, Leonora, et al. "Digital advertising: A more effective way to promote businesses' products." Journal of Business Administration Research 3.2 (2014): 59-67.
- Interactive advertising
  - Bezjian-Avery, Alexa, Bobby Calder, and Dawn Iacobucci. "New media interactive advertising vs. traditional advertising." Journal of advertising research 38 (1998): 23-32.