

INITIAL BIG PICTURE

16th June 2021

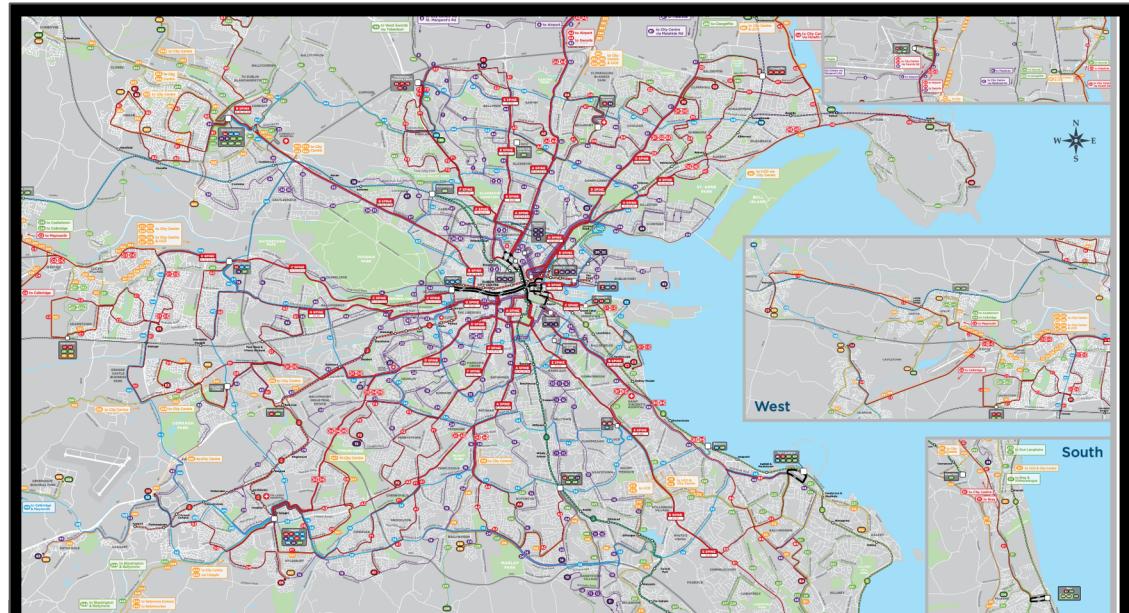


Fig. 1: Dublin Bus Network (BusConnect)

Team 10 - Team Members:

Daniel Danev – Code Lead

Danning Zhan – Maintenance Lead

Turlough Hannon – Coordination Lead

Adam Ryan – Customer Lead

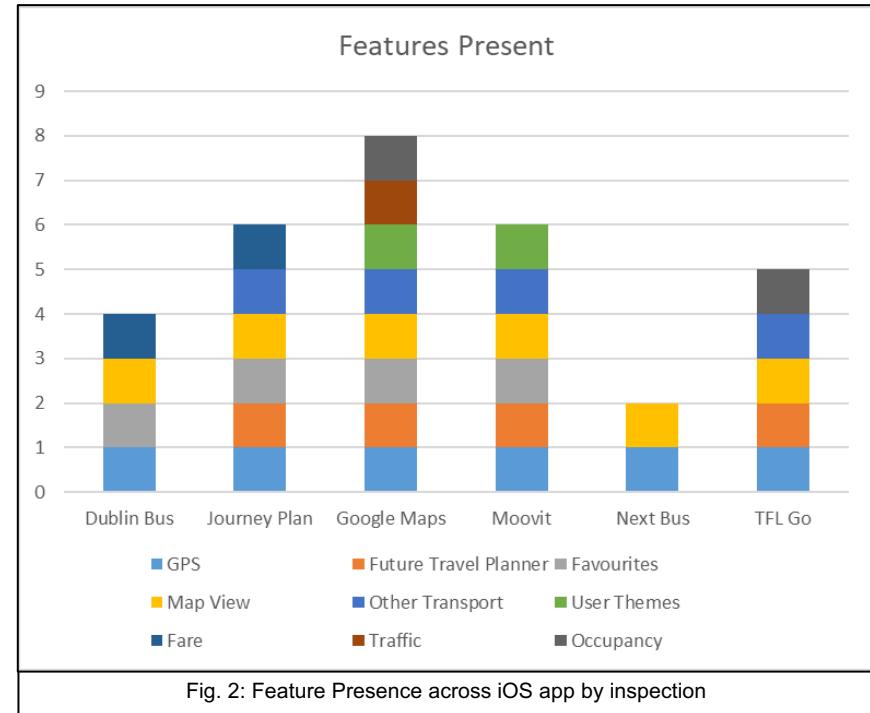
1. INTRODUCTION

- Analyse bus and weather data to create dynamic time estimates.
 - Complete route and sections of the route.
- User-focused design delivered via web app (mobile optimised).
 - The design should be easy to use with all relevant information.
- Innovative Features
 - The app should incorporate novel features beyond the brief.

2. EXISTING SOLUTIONS

- Common Features

- Geolocation.
- Real Time Planning and Future Scheduling.
 - Map Views and Text Views.
 - App in addition to Browser.
- Favourite Routes and Locations.
- Adding travel to Calendar.
- Multiple Transportation Systems.
 - Luas, Bike, Walk, Car.



- Existing travel apps have varied user experiences receiving mixed responses.
 - UX issues.
 - Travel time is real time info - Inaccurate for future journeys.

2. EXISTING SOLUTIONS

Dublin Bus - 1.9 out of 5.

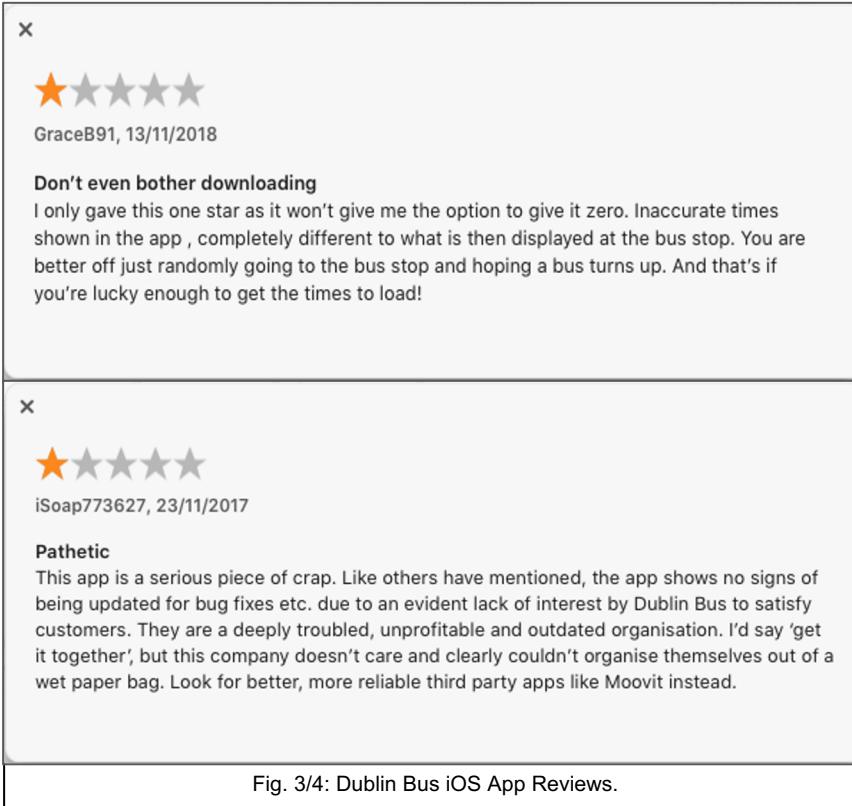


Fig. 3/4: Dublin Bus iOS App Reviews.

Moovit - 4.7 out of 5.

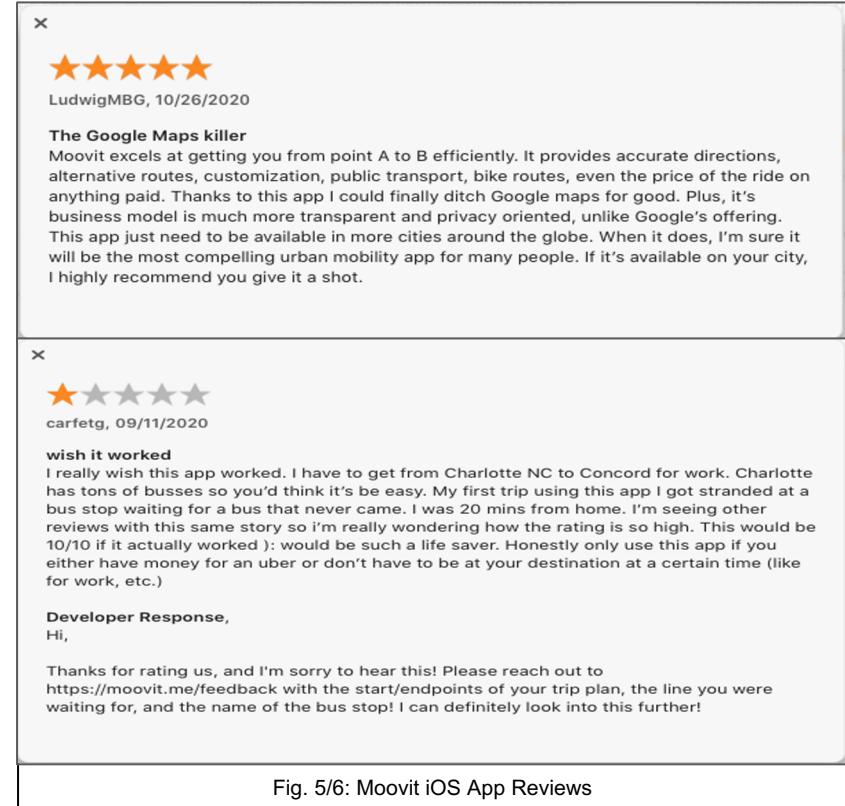
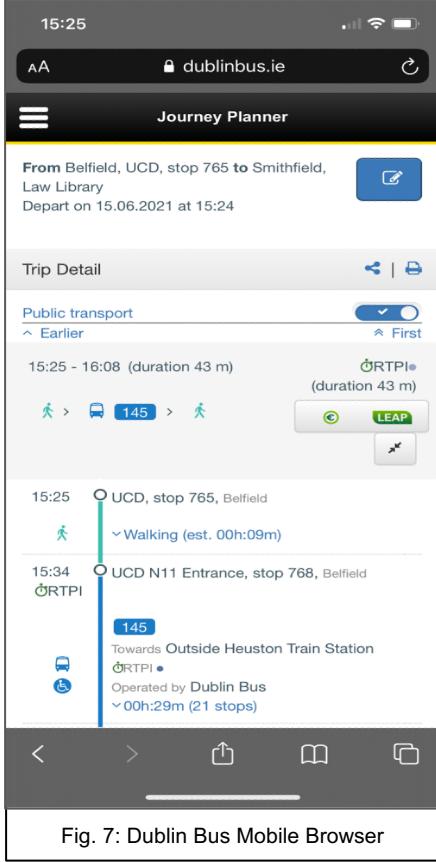


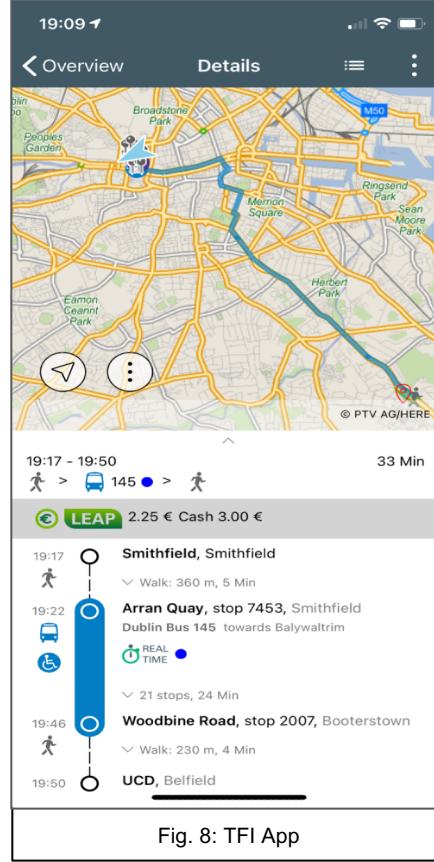
Fig. 5/6: Moovit iOS App Reviews

2. EXISTING SOLUTIONS

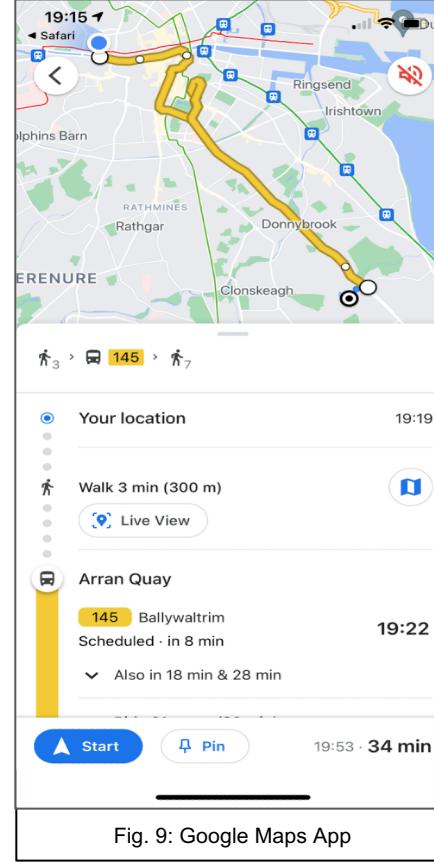
Dublin Bus



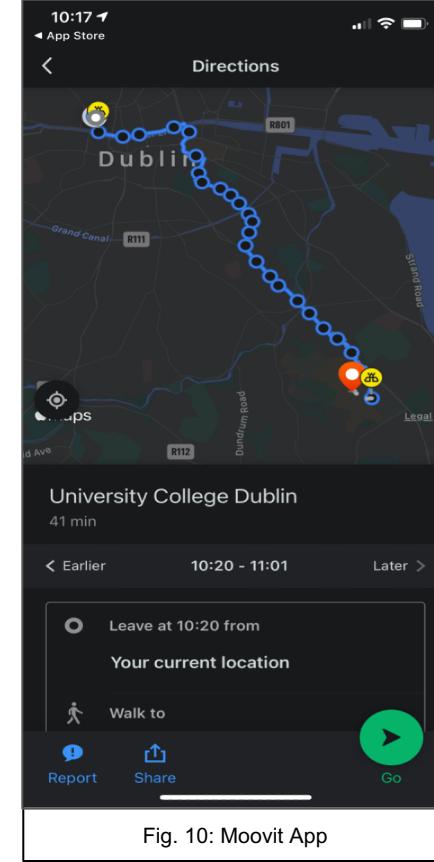
TFI - Journey Plan



Google Maps

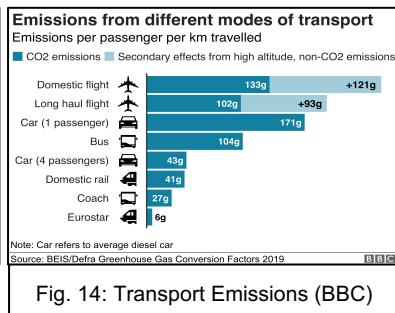
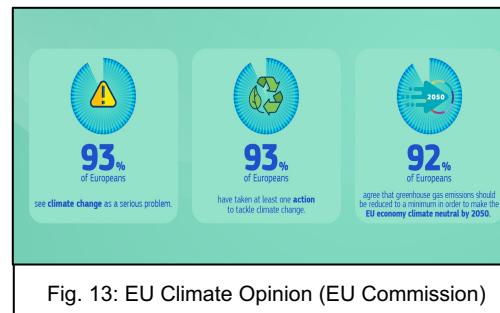
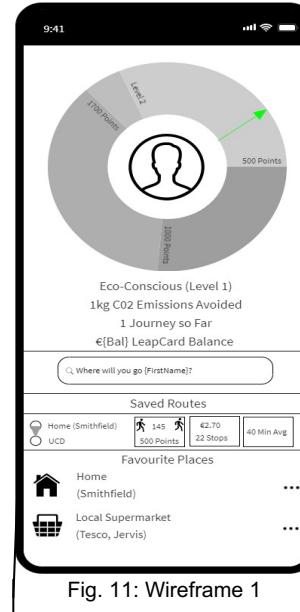


Moovit



3. OUR BIG IDEA

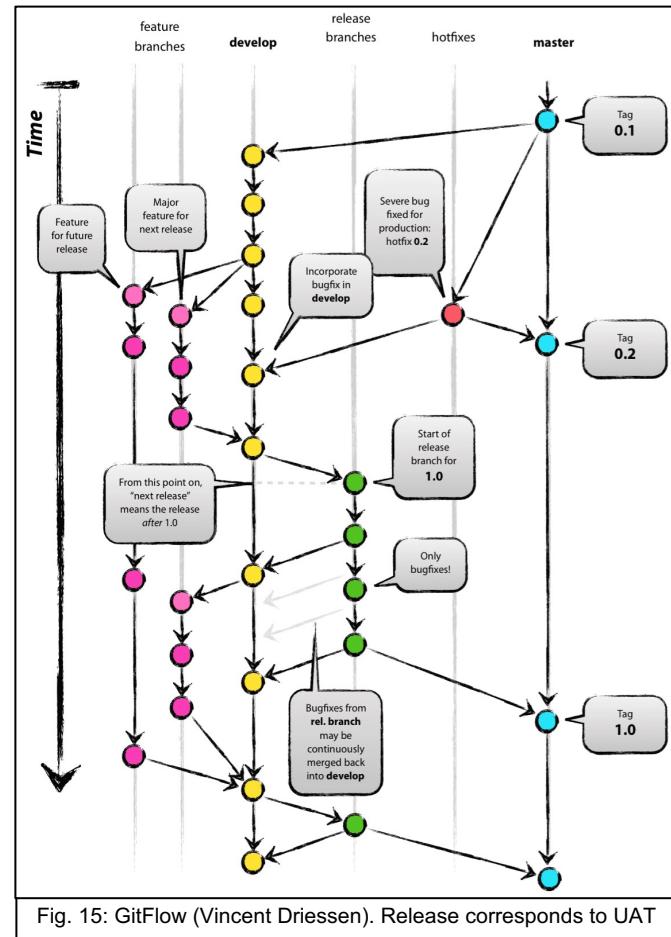
- User-feedback driven design.
- Accurate travel predictions with weather and traffic info.
- Incorporate features of well-received apps.
 - Traffic Info (Google Maps API).
 - Feedback Acquisition (in-app).
 - Account Management (user)
 - Bus Occupancy (user feedback).
 - Alternative Transport Methods (TFI API).
- New Innovations
 - Sustainability Focus.
 - Future weather highlighting.
 - Fare and Leapcard Data.
 - Popular Routes and Route Sharing.
 - Business Intelligence Incorporation (Google Analytics).



4. GUIDING PRINCIPLES & FULFILLMENT MECHANISMS

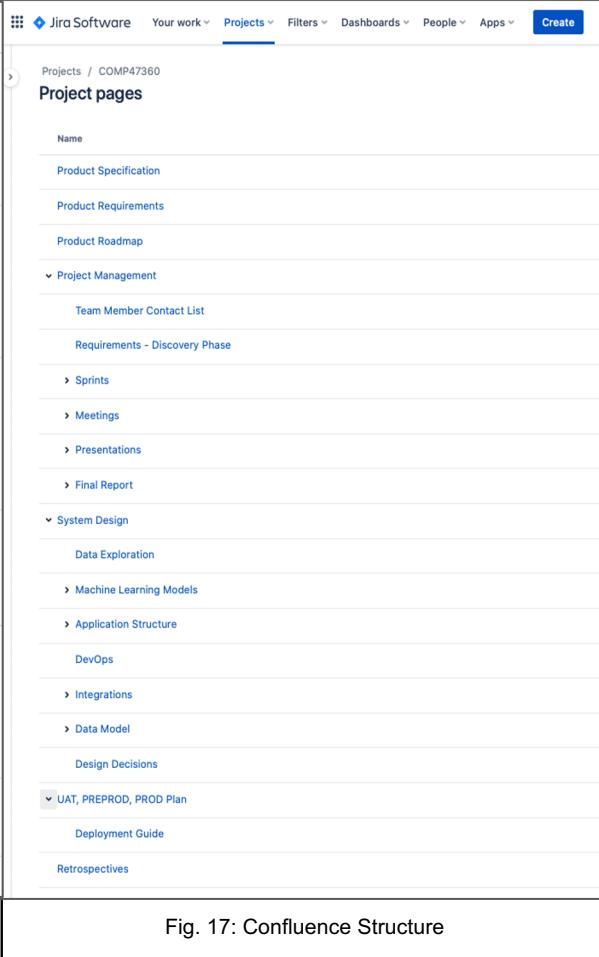
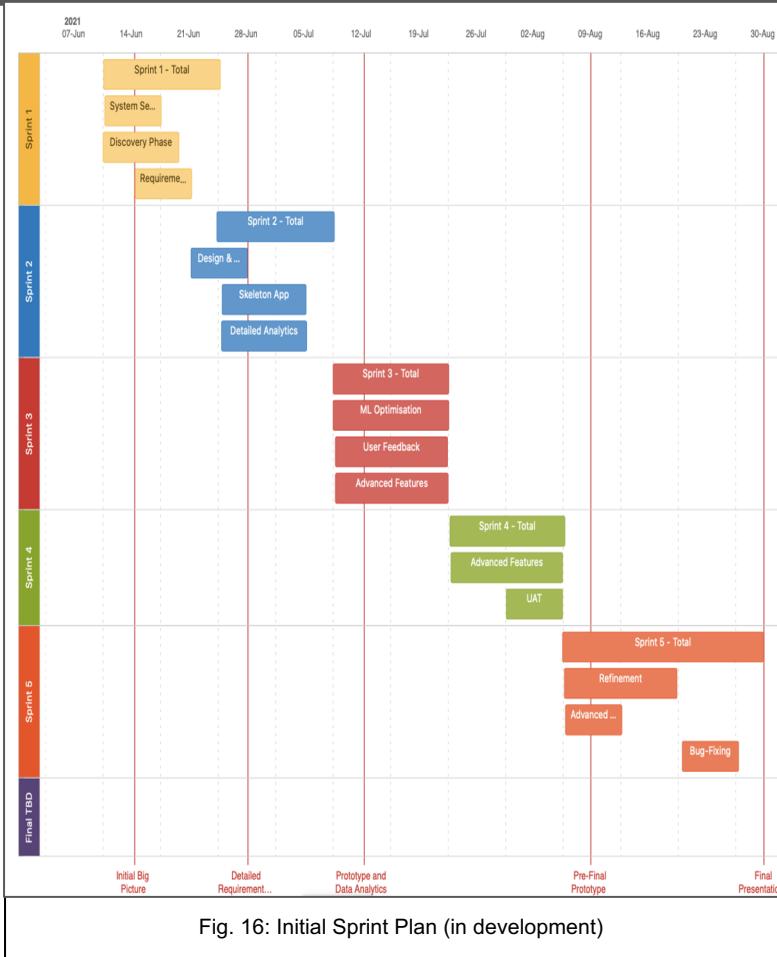
All made possible by modern software development tools, technologies and methods:

- Version Control and Repositories (GitHub/GitLab)
 - Develop (with branches) > Release > Production.
- Modern Tech Stack and Architecture
 - Django, MySQL, React, D3.js, to be confirmed
- Project management and Agile development
 - Github, Jira, Confluence.
- Data Sources
 - Google Maps API
 - TFI API
 - OpenWeatherMap & MET
 - User submission
 - Leapcard (pyleapcard)



5. PROJECT ROADMAP & MANAGEMENT STRATEGIES

- Agile Structure
 - Five Sprints.
 - Goals in Development.
 - User guidance in Sprint 2-5.
- Documentation and Communication
 - Jira.
 - Confluence.
- Meetings
 - Daily Check-ins.
 - Weekly Review.
- Role Distribution
 - Focused areas
 - Broad exposure to all.



6. Questions and Answers

“Every single full bus replaces the equivalent of 80 cars on our roads, reducing emissions by over 90% and freeing up 300 metres of roadway” – DublinBus in [Our Journey to Zero](#)

Thank you for your time, and attention, and we would welcome any questions

