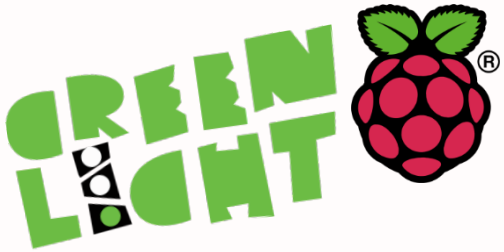

Team

Green light

By:
Paul Roskell
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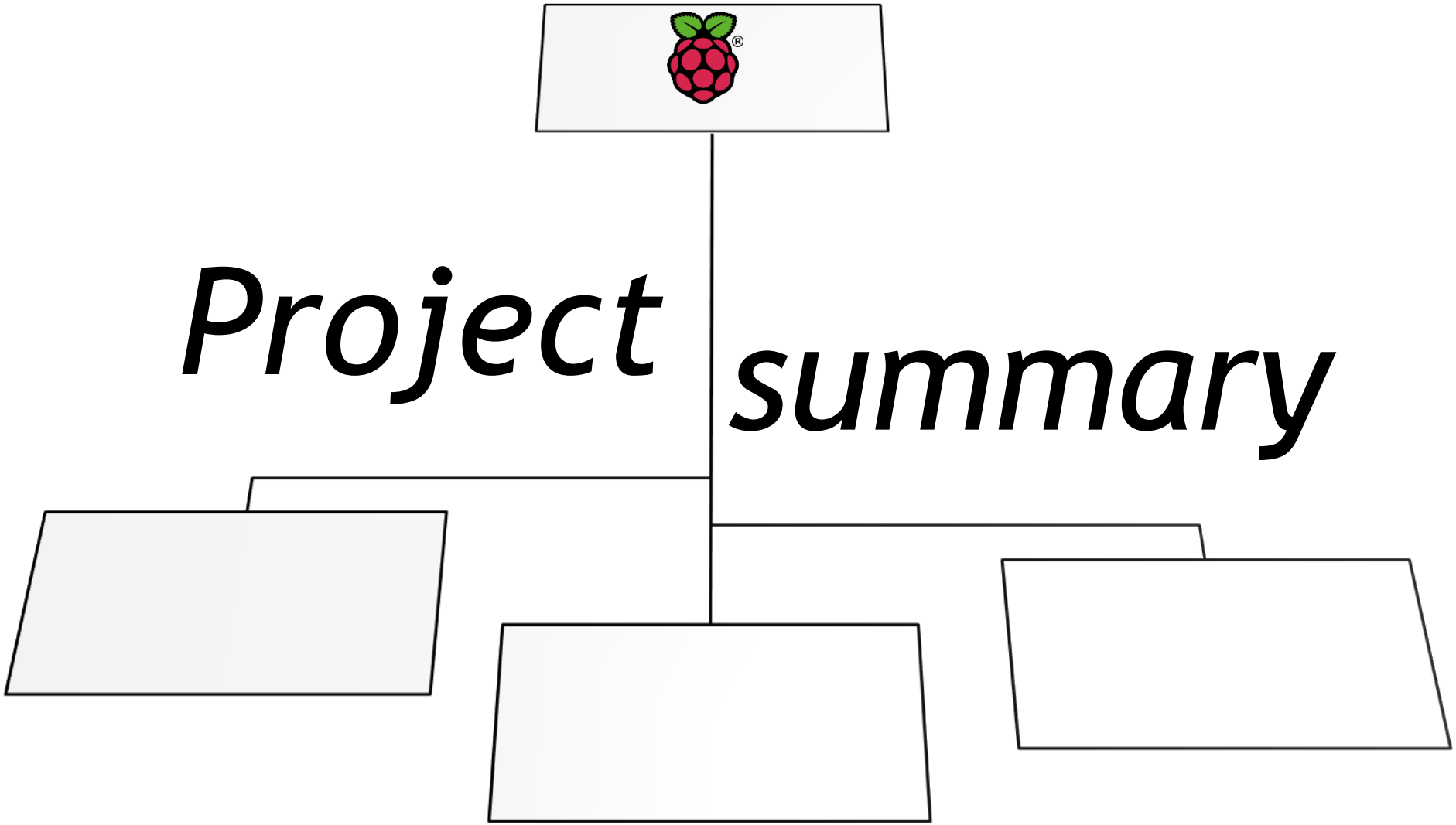

Project summary

Introduction

Our aim for this project is to create:

- *A traffic interpreter app powered by a Raspberry Pi*
- *A small scale model to show how the system navigates a driver from A to B.*

- ✓ *With the fastest route*
- ✓ *Reducing the time*
- ✓ *Reducing the amount of fuel consumed and fumes emitted*
- ✓ *Which can help the environment.*

How it works

The device, in theory, provides the quickest and fastest route possible to the driver's destination.

This is done using the Raspberry Pi in a few simple steps:

- *The Pi monitors the traffic at regular intervals*
- *Infrared sensors sense the traffic at signal points*
- *They send a signal to the Pi*
- *The Pi will analyze the information and make calculations*
- *A signal is sent back to the device which outputs the shortest route with least traffic*

Fuel efficiency

The system would improve fuel efficiency since:

- *It conserves the use of non-renewable fossil fuels*
- *It reduces the time taken to travel from one point to another*
- *By avoiding traffic jams, the time spent by an immobile vehicle-spewing out fumes but not moving-would be reduced*
- *The car engine will be running for less time, thus the combustion of fuels would be for a shorter period.*

Helping the environment

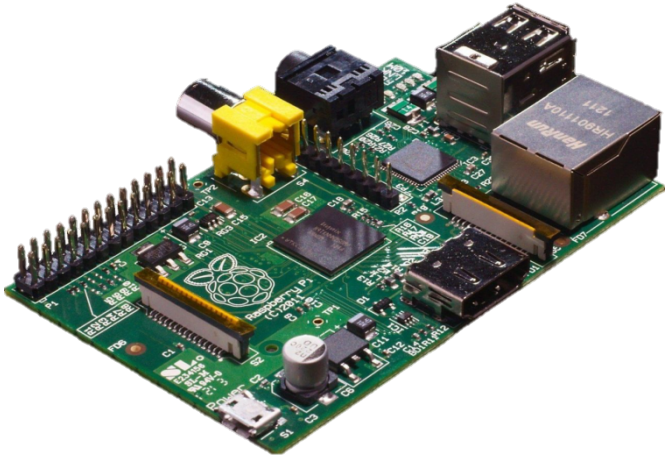
How it helps the environment:

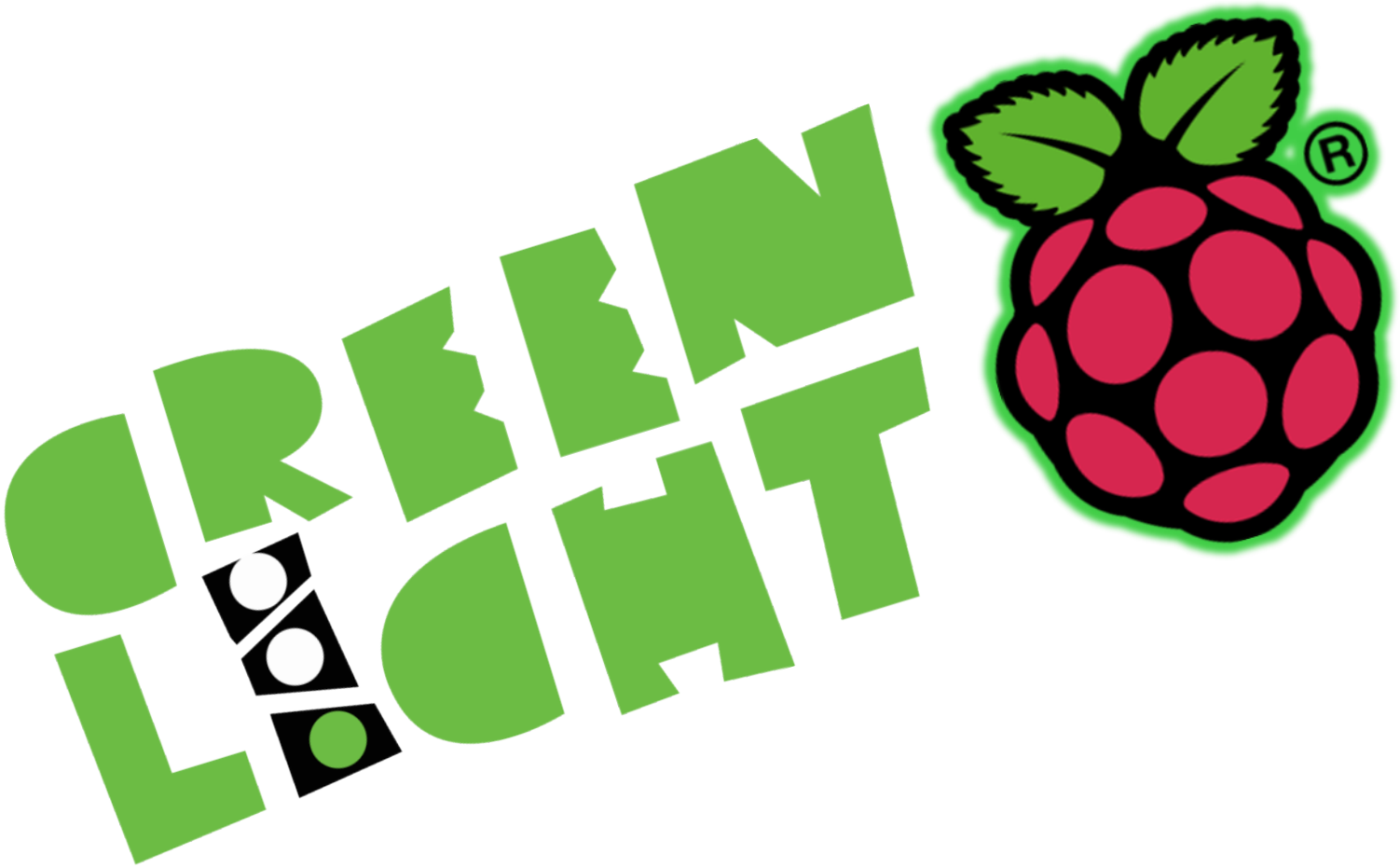
- *Reduces fuel consumption*
- *Reduces the amount of carbon dioxide and sulphur dioxide emissions.*
- *Thus reduces the Greenhouse effect on our planet*
- *And helps to maintain a sustainable atmosphere*

How is this better than a Satnav?

Benefits of a Raspberry Pi powered system:

- *It has a low cost*
- *So more accessible*
- *Reduces the impact of heavy traffic on the environment with air and noise pollution*
- *Small and easy to carry around*




GREEN
LIGHT