

# Smart Commute App

Project Name: Outrun

- All code in NoSleep.js and Shake.js - these are libraries. Both under MIT license (included at top of each file)
- The following code is a mix of our own and the "how to use" section of NoSleep.js (MIT License)  
var noSleep = new NoSleep();

```
var wakeLockEnabled = false;
var toggleEl = document.querySelector("#armbandToggle");
toggleEl.addEventListener('click', function() {
  if (!wakeLockEnabled) {
    noSleep.enable(); // keep the screen on!
    wakeLockEnabled = true;
  } else {
    noSleep.disable(); // let the screen turn off.
    wakeLockEnabled = false;
  }
}, false);
```

- Bootstrap library was used to do our CSS (MIT License)
- GMaps library was used to simplify the google maps API (MIT License)

## Aims and Status Description

1. The aim of the application and how it can support smarter commuting?

The aim of our application is to make the users commute more interesting and competitive whilst at the same time promoting a more active lifestyle by encouraging users to walk, run or cycle on their commute to work. "Outrun" supports smarter commuting because by encouraging users to be more active they will become healthier due to more exercise and also give them a better mental wellbeing as it has been suggested that exercise is not only good for you physically but can make you happier. Users will also be able to get a sense of achievement as they will see improvements in their commute times over time suggesting that they are walking, running or cycling faster.

2. Applications key features:

- Timing a user's commute and recording the statistics (route, origin, destination, date)
- "Ghost route" - if the user has travelled a route before, as the user is travelling they can see where they were at a certain time before on their fastest journey. This gives the effect the user is racing themselves.
- Display statistics (route, origin, destination, date).
- "Arm Band Mode" - the user can attach their phone to an armband or simply hold the phone and use it as a pedometer.
- Delete all their previous statistics.
- Uses GPS to track locations.
- Uses local storage to store statistics.
- Uses phone accelerometers for pedometer.

3. Limitations of application:

- Phone must be unlocked in order to track live routes and use pedometer - to keep the phone unlocked we use a library called NoSleep.js.
- To create a pedometer, we use the library Shake.js - it is sometimes inaccurate but not by too much.

4. Simulated Elements/Known Bugs:

- No smoothing on GPS Input so without "High Accuracy" GPS it can sometimes give semi inaccurate coordinates.

5. Development Environment:

We used a GitLab repository for our code base. The app was coded in JavaScript, HTML and CSS/Bootstrap with the use of the google maps API and a JavaScript library: NoSleep.js. All group members used IntelliJ IDE whilst coding and hosted the project locally on their own DEVWEB while developing it.

6. Cross Device Compatibility:

The application is compatible on iOS and Android with support for Android 6+ and iOS 9+. The application has been tested on Google Chrome and Safari although should work on other modern mobile browsers.

# NONPROFIT BUSINESS MODEL CANVAS

OPERATIONS LEVEL		ENGAGEMENT LEVEL		
KEY PARTNERS	KEY ACTIVITIES	SOCIAL VALUE PROPOSITIONS	RELATIONS	CO-CREATORS
<ul style="list-style-type: none"><li>• Developers</li><li>• Hosting Company</li></ul>	<ul style="list-style-type: none"><li>• Service Delivery</li><li>• Research</li><li>• App Development</li></ul>	The aim of our application is to make the users commute more interesting and competitive whilst at the same time promoting a more active lifestyle by encouraging users to walk, run or cycle on their commute to work.	<ul style="list-style-type: none"><li>• Community</li><li>• Self-service</li></ul>	<ul style="list-style-type: none"><li>• Members</li><li>• Volunteers</li><li>• Participants</li></ul>
	KEY RESOURCES		CHANNELS	
	<ul style="list-style-type: none"><li>• Software Developers</li></ul>		<ul style="list-style-type: none"><li>• Mobile</li><li>• Social Media</li></ul>	
COST STRUCTURE		INCOME STREAMS		
<ul style="list-style-type: none"><li>• Developers wages</li><li>• Maintenance of the app</li><li>• Software development programs (IntelliJ IDE)</li><li>• Pay for using the servers</li></ul>		<ul style="list-style-type: none"><li>• Advertisements</li></ul>		