

# Getting Started at Hackathons

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## Track 2: Building a MVP with Firebase and ReactJS



# Hi, I'm Eric Jiang 🖐️

- Currently, the Project Lead for monPlan
- Co-founded GeckoDM and MARIE.js
- Co-founded and Pitched FutureYou to SMC, now spun that off as a seperate project
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# Prerequisites

- NodeJS (preferably with YarnPKG)
- An IDE 
- An Internet  Connection

# What is Firebase?

Firebase is a mobile and web application development platform developed by Firebase, Inc. in 2011, then acquired by Google in 2014.

— Wikipedia

We are going to use Firebase Hosting in this demo

# What is ReactJS

ReactJS is a **component-based** that is used to build user-interfaces whether its for websites (Frontend) or hybrid (ElectronJS) applications

# Installing Create-React-App

CRA is a zero-configuration generator tool that can get us started up quickly

```
npm install -g create-react-app
```

```
# or if you are using yarn
```

```
yarn add -g create-react-app
```

We will now create our new app.

So after we clone our git repository, we look at using create-react-app into our new directory

```
create-react-app myapp
```

# We then go into our new directory and install all the dependencies we need

```
npm install material-ui@next react-router-dom whatwg-fetch --save
```

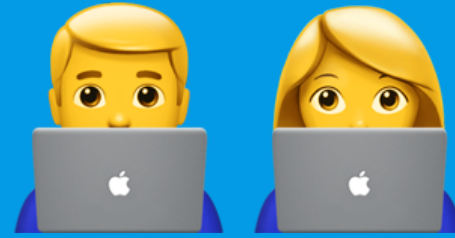
```
# or
```

```
yarn add material-ui@next react-router-dom whatwg-fetch
```

- We're using fetch polyfill here as fetch is built in natively into the browser, and it is not available for IE11 or prior
- We're also using the beta version of material-ui v1 (it will go GA Soon)



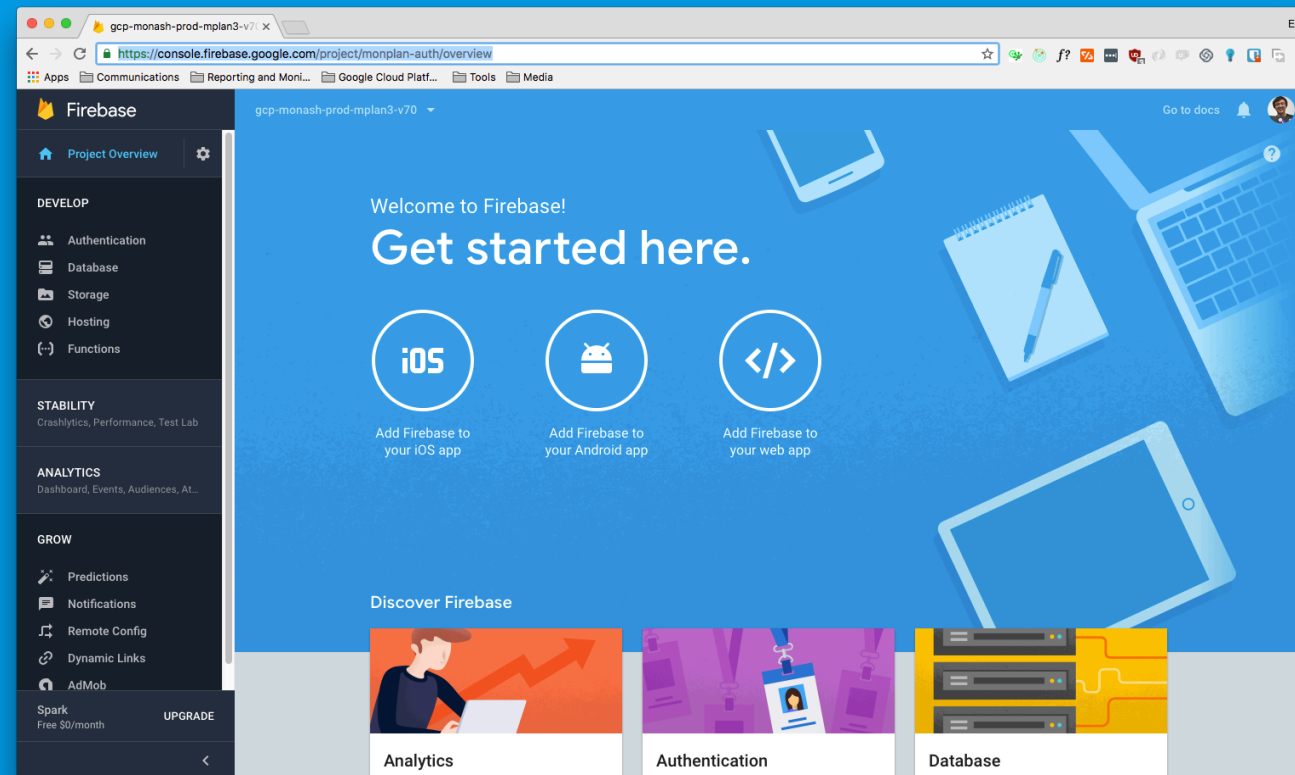
# Time for coding!



## Let's build an app which users can see and search all the rooms within Monash



# Initialise Firebase Project



1. Go to [console.firebase.google.com/](https://console.firebase.google.com/)
2. Create a new project
3. And we're good to go!

# Let's build a Room Card First

```
// src/components/RoomCard.js

import React from "react";
import { Card, CardMedia } from "material-ui";
import { CardContent } from "material-ui/Card";
import Typography from "material-ui/Typography";

export default function RoomCard({ roomCode, roomLocation, roomPicture }) {
  return (
    <Card>
      <CardMedia
        image={roomPicture}
        style={{
          height: 200
        }}
      />
      <CardContent>
        <Typography variant="subheading">{roomCode}</Typography>
        <Typography variant="title">{roomLocation}</Typography>
      </CardContent>
    </Card>
  );
}
```

# We can easily reference this directly in our main component

```
// src/app.js
import React, { Component } from "react";
import logo from "../logo.svg";
import "../App.css";
import RoomCard from "../components/RoomCard";

class App extends Component {
  render() {
    return (
      <div className="App">
        <header className="App-header">
          <img src={logo} className="App-logo" alt="logo" />
          <h1 className="App-title">Welcome to React</h1>
        </header>
        <RoomCard
          roomCode="S11_LECTURE_HALL"
          roomLocation="17 Rainforest Walk"
          roomPicture="https://www.monash.edu/__data/assets/image/0009/292365/science-lecture-theatre1.jpg"
        />
      </div>
    );
  }
}

export default App;
```

# Now connect it to Firebase