

CSCI2720 Group Project Outline

Group 15

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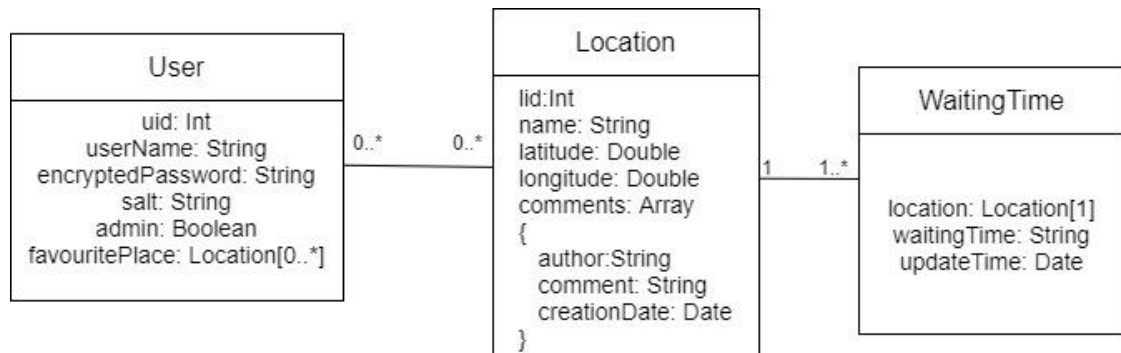
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1. Data Source

- ✧ Accident and Emergency Waiting Time by Hospital

2. Data Schema Plan



3. APIs to be used

- Accident and Emergency Waiting Time by Hospital (English)
 - <https://data.gov.hk/en-data/dataset/hospital-hadata-ae-waiting-time>
- Google Map JavaScript API
 - <https://developers.google.com/maps/documentation/javascript/overview>

4. Why ReactJS + MongoDB?

- ReactJS vs Angular

Pros	Cons
<ul style="list-style-type: none">▶ ReactJS using virtual DOM and it is faster and more efficient.	<ul style="list-style-type: none">▶ Angular using incremental DOM and it take more time on difference calculation.¹
<ul style="list-style-type: none">▶ ReactJS has a smaller learning curve, simple design, easy for beginners.	<ul style="list-style-type: none">▶ Angular has steeper learning curve. It requires to learn TS and thorough knowledge of Angular template syntax.

- MongoDB vs MySQL

Pros	Cons
<ul style="list-style-type: none">▶ MongoDB performance is faster, since data put in the same collection.	<ul style="list-style-type: none">▶ MySQL is slower, data put in different table and you have to join it every query.
<ul style="list-style-type: none">▶ Faster development and deploy. No restricted schema.	<ul style="list-style-type: none">▶ Have to spend time to design the schema and the table normalization. Lower the development speed.

¹ <https://blog.bitsrc.io/incremental-vs-virtual-dom-eb7157e43dca>