

The Big Project Planning Document

The primary [project requirements](#) are listed below; we may make minor additions before the delivery date, but nothing that would prevent using any code you write before then.

What's the name of your app/product?

UIC Grade Distribution App

What is your name?

Kai Bonsol

Who are your target users? Who would use your app?

Students attending the University of Illinois at Chicago.

What benefit would they gain by using your app?

They can see the grade distribution of classes you might want to take in a nice format, it could help you make schedule decisions.

Name and briefly describe the app's screens (four or more required)

Name	Description
Search	Input the fields to search for grade distributions of courses
List of results	If more than one can be possible based on what the user entered, show the list of results
Grade Distributions	A graph of the grades for the course along with some extra cards of information.
Close by restaurants	Use device location to show nearby restaurants from Yelp API

What Material Components for the Web components will you use?

Snackbar, dialog, circular progress, and text fields.

What data API endpoints will your app be using? (two or more required)

<https://kbonsol.herokuapp.com/grades>

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https://icanhazdadjoke.com/
```

What visualization will be included in your app? (Google Maps, Google Chart, d3.js, etc.)

Google Charts

What data will you store in and retrieve from the IndexedDB?

The JSON retrieved from the fetch to kbonsol.herokuapp.com/grades.

What device interaction(s) will your app utilize? (one or more required)

Location

What app shell assets will your app's Service Worker cache?

Index.html

Basic Requirements:

1. Uses the Single Page Application architecture,
2. Includes at least 4 screens;
3. UI built using Material Components for the Web;
4. Retrieves data from at least two different endpoint domains (can't use multiple from the same source);
5. Includes a visualization (map, chart, or ?);
6. Stores and retrieves data from the IndexedDB;
7. Utilizes some hardware feature (sensor, camera, microphone, etc);
8. Installable as a PWA

Events

What are the key events, objects and actions in your app? (Sample content below. This page is for you to think through some of the issues *before* you start coding.)

Object	Event	Action
<i>page</i>	<i>load</i>	
<i>nav button: <name></i>	<i>click</i>	<i>show screen <name></i>
	<i>Response from <data source> received</i>	

Unknowns

What don't you know that you need to know?

Schedule

How will you have a product to deliver on the deadline date?

What are the milestones in your development of the project?

sample content below

Decisions and/or deliverables	Date
Planning and drawing out what the app needs and will look like	
Beginning implementation, mcw/navbar/screen loading	
Filtering options and API calls	
Visualization	
PWA - Service Worker, Manifest, Cache	
IndexedDB work	
Polish/Final Tweaks	
Product Delivery	04/28/2021

Resources

What are your resources for the following technical topics? (Should include a documentation resource and could include class samples you'll consult)

Topic	Resource Links
Material Components	
Single Page Applications/Multi-Screen App	
AJAX calls	
Your visualization option	
Your device feature option	
IndexedDB	
Making your app installable	