

CMPS 356 – Fall 2022

Web Applications Design and Development

Assignment 01

Composition and State

Instructions

1. The deadline for completing your work is Sunday, October 23, 2022 at 11:59:59pm
2. Push your code to your private repository under `assignments/assignment01`
3. Commit often and use meaningful message summaries and descriptions
4. Complete your work before the deadline; a late push will be ignored
5. Deploy your site using Vercel (<https://vercel.com>) and include a link in `link.txt`
6. Any form of plagiarism will be treated seriously and reported

1. Forex Dashboard

1. Create a Next application under `assignment01`.
 - 1.1. Use React to complete the following tasks.
 - 1.2. Use MUI for your user interface components.
2. Design a component, `Pair`, that displays four values for a forex pair: high, low, open, and close. It takes a forex pair name and four numerical values as properties.
3. Use Polygon's API (<https://polygon.io>) to fetch your data. Login using your GitHub account to receive an API key for the free tier
 - 3.1. Your API key should not be hardcoded into your source files. Use an environment variable to store and access it: <https://nextjs.org/docs/basic-features/environment-variables>
4. Your forex dashboard should be accessible through `/dashboard`.
 - 4.1. Display a responsive grid of forex pairs in the dashboard page.
 - 4.2. You should display a list of most popular forex pairs (at least 3).
5. Allow the user to search for forex pairs and add them to the dashboard. A forex pair should not be repeated in the most popular section and user selection.
6. Save the user selection of forex pairs and reload it between sessions.