

We're looking forward to interviewing you at Course Hero and hope that you are too!

In this phase of your interview process we are interested in seeing how you approach technical problem solving, structure code, and communicate your thoughts and ideas. This coding challenge is a 3-part problem, the first part of which is designed as a take-home exercise. Please use https://codesandbox.io/s/ and choose whatever framework that you are most comfortable working in and then follow the instructions below. Please make sure to **SAVE** after you are done with the take home problem, and **send your recruiter the link before your interview**. We will use this link to access your code and will work together on this platform to extend your base program during the next phase of your interview process.

While working on this take-home exercise it's important that you take notes of where you get stuck, how you get unstuck, what sections you refactor and why. This exercise is "open book" so feel free to use online resources while completing your solution.

If you have any questions, please don't hesitate to reach out to your recruiter. Have fun!

Take Home

Build a component that allows a user to input a course string, and display the course details. You should provide validation of the course string, and display an error if what they entered is invalid.

This should be client side only.

Example:

Course

CS 111 Fall 2018

Department: CS

Course Number: 111

Semester: Fall

Year: 2018

Course String Details:

 A valid course string is a single string that is a combination of a Department+Course Number, followed by Semester+Year.

- Department is always one or more alphabetic characters.
- Course Number is always one or more numeric characters.
- Department and course number can be separated by an optional delimiter.
 - o Delimiters are "-", " ", or ":".
- Semester is either an abbreviation or the complete semester.
- Year is either two digits or four digits (you can assume the year 2000 or greater).
- Semester+Year combination can be swapped in position (that is, Year can come before Semester).
- There is always a space between the Department+Course Number and the Semester+Year.
- Semesters could be abbreviated as: F (Fall), W (Winter), S (Spring), Su (Summer)

For example:

```
CS111 2018 Fall
CS-111 Fall 2016
Math 123 2015 Spring
```

Examples of Department+Course Number combinations:

```
CS111
CS 111
CS:111
CS-111
```

Examples of Semester+Year combinations:

```
Fall 2018
fall 18
2016 Fall
F2016
Fall2016
```

All input should be normalized, that is, 2 digits years should become 4 digits, and semester abbreviations should become full semesters, so that any combination of the above examples will result in the exact same course:

```
Department: CS
Course Number: 111
Year: 2016
```

Semester: Fall