

# Pair Programming 3: TidePooler

## Task 0: Build & Run

- Build the TidePooler Alexa Skill using the code in your branch
- Test it on your Echo Device or in [echosim.io](https://echosim.io)
- What do you notice?

## Task 1: Code Study

- What are the different intents in this Skill?
- What do the three Custom Slots represent?
  - Are all of them required in each intent?
  - How does Alexa respond if you don't provide values for one or more of them?
- What are Sessions being used for?
  - What information is being stored within a Session?
  - How does the use of a Session make the Skill more conversational?
  - What does each of the following represent? What values can each take on?
    - SESSION\_CITY
    - SESSION\_STATION
    - SESSION\_DATE\_DISPLAY
    - SESSION\_DATE\_REQUEST
- In what ways is SSML being used to enhance this Skill?
- What is the URL to which the Tide API request is being made?
  - What parameters are being included in the API request? (Refer to the [NOAA API documentation](#))
  - What does each parameter represent?
- What code pathway does the sample utterance below follow? (i.e., what methods get called, and in what order?)
  - "When is high tide? "

## Task 2: Conceptual Challenge

- What is the purpose of the CityDateValues<L, R> class?
  - What do the “L” and the “R” represent?
  - Hint: read about “Generics” in Java
- How might you achieve the same purpose without using generics?

## Task 3: Coding Challenge

- There is currently a bug in the TidePooler Skill, which results in the following message sometimes being erroneously returned:
  - “Sorry, the National Oceanic tide service is experiencing a problem. Please try again later.”

Can you fix the bug?