**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](http://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](https://tidesandcurrents.noaa.gov/api/))
  + 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?