# Lesson 21

### (5 min)

### Announcements:

- Final Project Survey will help decide partner groups
- Everybody please take it at the end of class

### (10 min)

#### Student Demo

- Python scraper for Alexa Skills Store
- How might we use this for our final projects?
- @Jack how could you share this with us so we can all use it?

## (15 min)

# Generics in Java

- Show code in Generics Demo
- Talk about need for generics
- Talk about for each loop
- Talk about printf syntax for "format string"
  - o Interesting other use cases

## (5 min)

#### TidePooler Bug Fix

- The base URL needs to be "https" not "http" because the API requires a secure connection
  - It worked in the browser b/c it knew to correct the URL to "https"
  - Lambda doesn't automatically do this
- After you fix this, you will run into a Timeout Error
  - Adjust to 1 min
- Whenever making API calls to another service, it takes several seconds, so you have to increase the timeout
- Also the slowness in the first call, do you know why that is?
  - Because it's spinning up a new server for our function, and that takes a few seconds
  - This allows them to let Lambda servers go dormant when not in use, which helps make AWS so inexpensive

(15 min)
TidePooler — Breakout Groups — Zoom

- Focus on 2 things:
  - Task 1: Create a diagram or some kind of visual (or write out the flow chart) of all the methods invoked (in order) when this sample utterance is said:
    - "when is high tide?"
    - Use log statements if needed
  - o Task 2: Conceptual Challenge
    - What is the purpose of the CityDateValues<L, R> class?
    - How might you achieve the same purpose without generics?

(10 min) Wrap Up

- Take Final Project Group survey
  - Final project groups will be announced later today
- Please plan to meet once before Thanksgiving to brainstorm final project ideas
  - o I will let you all find a convenient time and coordinate
  - You should send out meeting invites as well
  - Send me a progress update (by email) after you have met