

# Lecture 01

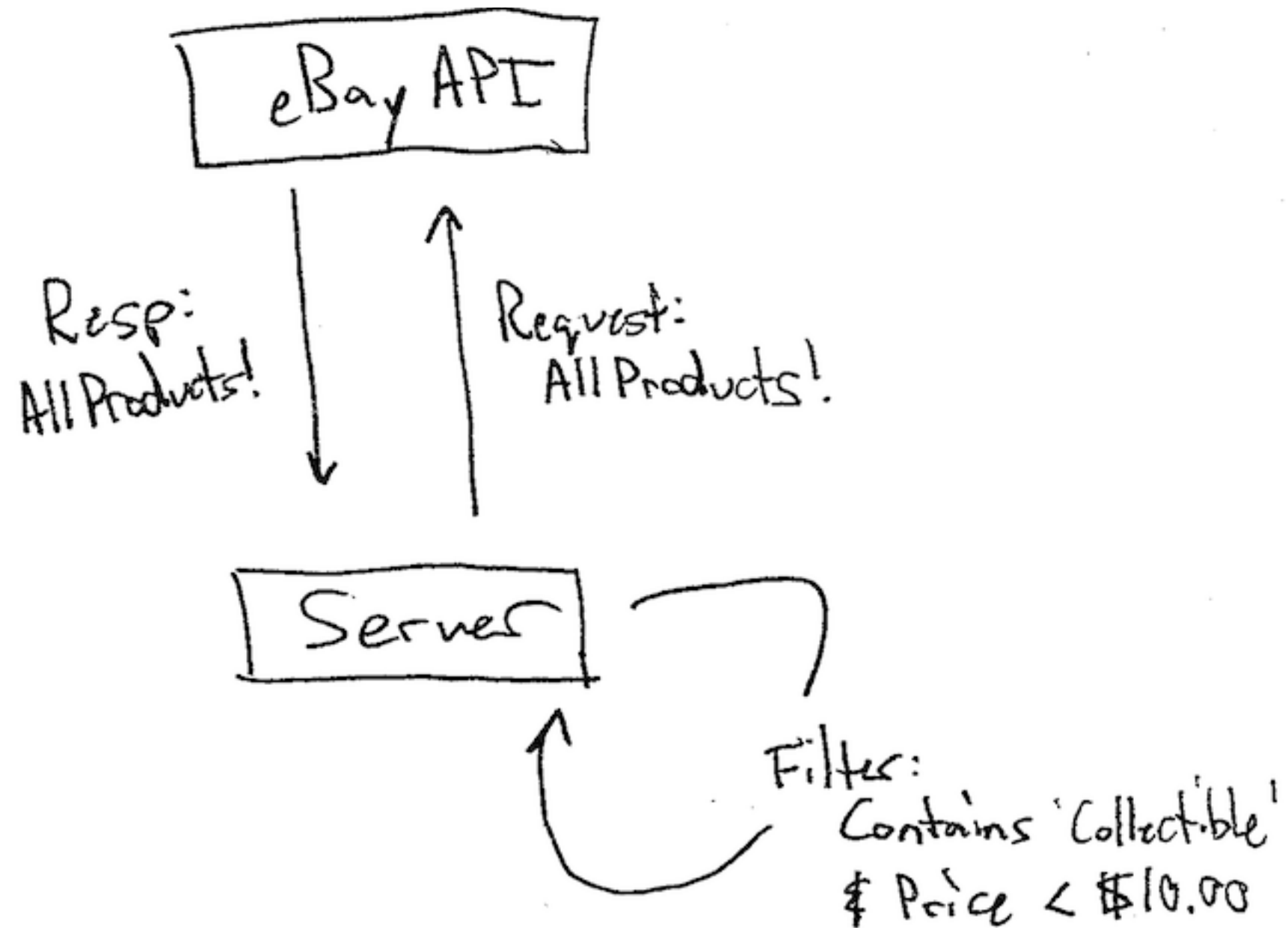
Business: Deconstructing a Project

# Project Components

- Follow the data!
- Request -> Processing -> Response
- At each processing step ask:  
    “Are there hidden dependencies?”

# Example: eBay Listings

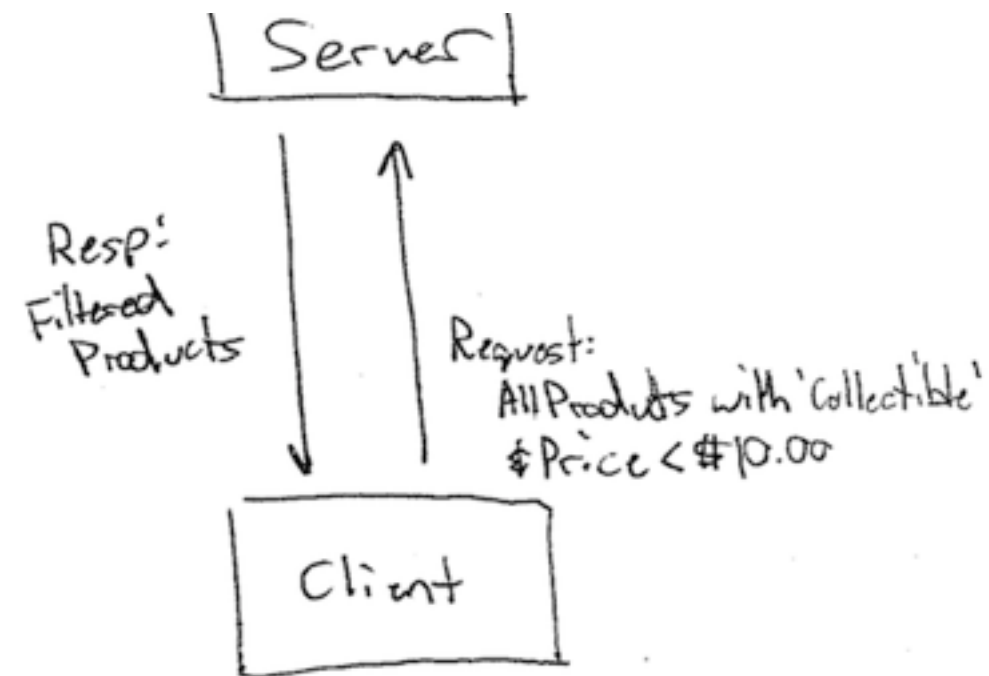
- Display all product listings under \$10 that include the words 'Collectible'



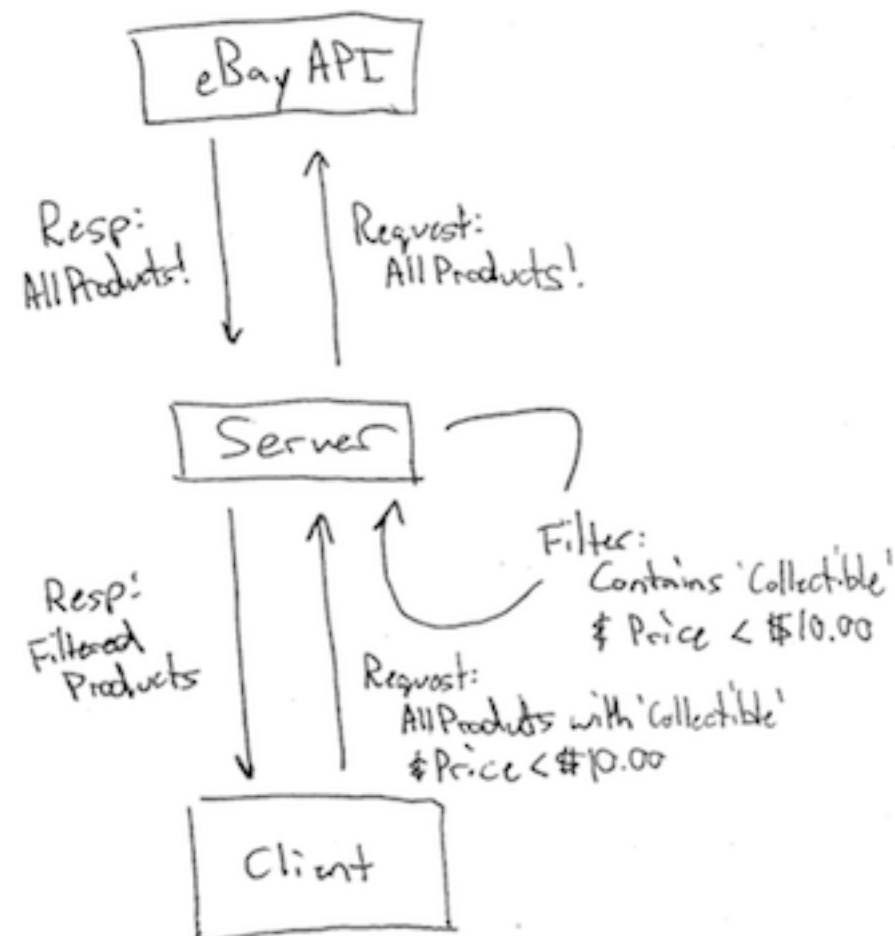
# Following Data

# Another way:

- Interface | Data Transfer | Storage
- Hint: use this method for front-end features
- Rethinking the eBay example in terms of user interface:



# Interface



gives us whole picture

# Responsibility

- Need to know what you are doing, and what others are doing
- Make a diagram that maps components to project members
- List known unknowns and assign responsibility for their resolution



# Logical Grouping

- Prioritize: client; team; dev
- Organize components by dependency
- Hint: It will mimic the data flow!
- Write dependency graph and block reducing order

# Component Breakdown

- How is the data stored?
- How is the data retrieved?
- How is the data represented at each step?

# Req/Tech

- Keeps your assumptions honest
- Write a requirement in plain english:
  - ‘User can view his profile on device’
- ...and translate it using the technology:
  - ‘The device makes a JSON GET request to the Rails app which returns the correct User object from the MySQL

# Putting it all Together

- By doing this you get:
  - Foundation for an estimate
  - Uncover hidden assumptions
  - Organizational timeline
  - System for answering question ‘What should I be working on?’

# Simple Project to Breakdown

- ‘Best Fishing Spot’ Webpage:
- “We like to share our favorite spots to catch stripers. Our members want to be able to submit GPS coordinates with a description that can then be viewed by the rest of the users.” -- Joe Fish, our client

# Extra Credit

# User Stories

- Earlier we followed the data. Now let's flip things and follow the user:
- Choose simple, encapsulated task
- What does she want to do?
- How does she do it? (clicking? data entry?)

# Complex Project

- Online Fish Auction:
- “Everyday we lay out the day’s catch and open our auction house so buyers can come view and bid on fish. We want to expand out market, but buyers are picky about quality and our auction is all done on paper. We need a way for buyers who are physically away from the auction house to still participate by snapping photos of the fish, uploading their details and prices, and allowing people bid online or from their phone.”