A test? Or, maybe, not a test

I'd like to see how you're doing. You can use your notes/homeworks/etc and googling, but no asking people.

That means no help from me, TAs, or other students.

Chart 1: Scatter plot

> If you find something especially hard, or your code keeps breaking, just hit undo until your graph kind of works and skip to the next part or problem.

Use `player_stats.csv` to make a scatterplot of NBA players.

- Height goes across the bottom, weight goes up and down
- Color each point based on the player's position
- Size each point should be related to the average points scored per game
- Since the points will be overlapping, make each point a little transparent
- Graphic should be 600 pixels wide, 300 pixels tall. Margins are up to you.

Hints:

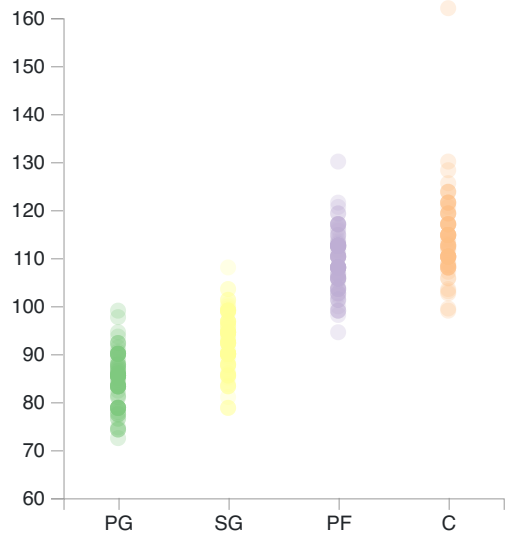
- Cut and paste all of the margin/height/width/inserting svg code from other work you've done
- Honestly cutting and pasting an entire scatterplot might not be a bad idea. Then just change the scales and the column names.
- The `Pos` column is position, `Height` and `Weight` are what you'd expect. Points per game is `PPG`.
- Pay attention to capitalization, it matters!
- Set the bounds of your scales to be something that makes sense visually.
- Maybe start with 0-260 on height and 0-200 on weight, then work on centering
- No player averages more than 30 points per game

Chart 2: Scatter plot

> If you find something especially hard, or your code keeps breaking, just hit undo until your graph kind of works and skip to the next part or problem.

Use `player_stats.csv` to make another scatterplot of NBA players.

- Position goes across the bottom, weight (kg) goes up and down
- Make the graphic a little more narrow.
- Color each point based on the player's position
- Make the points all the same size
- Give me a little spacing between the axis lines and the circles



Hints:

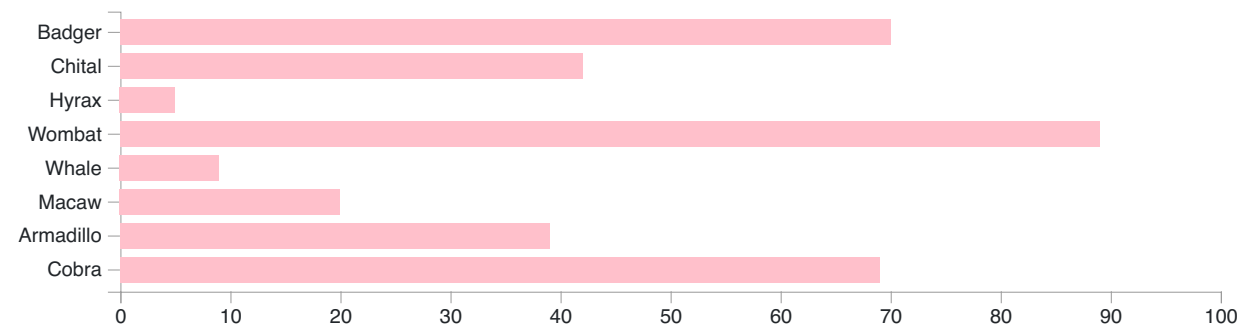
- Cutting and pasting from the last chart is a good idea, but remember to change the div you're pointing at
- The only positions in this dataset are:
  - `PG` (point guard)
  - `SG` (shooting guard)
  - `PF` (power forward)
  - `C` (center)
- Yes, I asked for spacing, but don't try to start your `xPositionScale` at anything other than zero. There's another way.

Chart 3: Simple bar graph

> If you find something especially hard, or your code keeps breaking, just hit undo until your graph kind of works and skip to the next part or problem.

Make a horizontal bar graph using `animal-counts.csv`.

- The animals should be on the y axis
- Pink bars should represent how many animals are in each group
- The maximum number of animals should be 100
- The bars should take up about 75% of their space (aka there should be padding between them)



Hints:

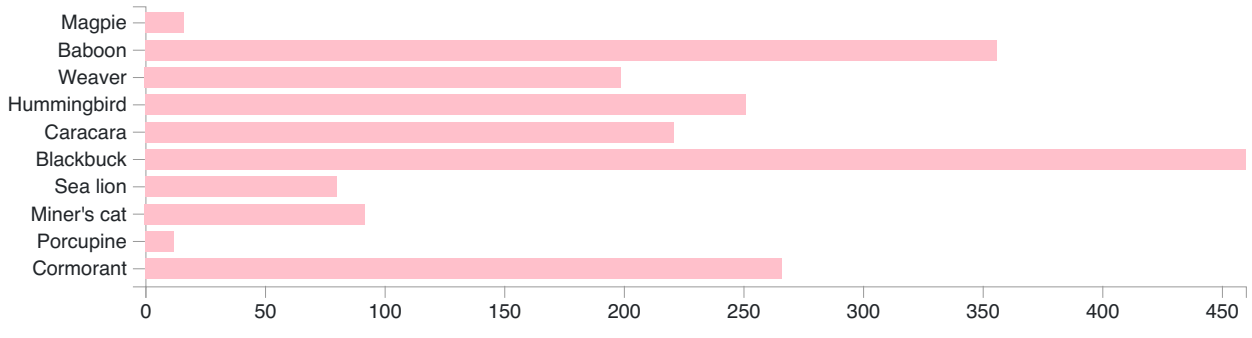
- Cut and paste all of the margin/height/width/inserting svg code from other work you've done
- When you cut and paste, remember to change the id of the div you're looking for
- Think about what kind of scale you're using
- I already gave you a hint
- If you call it `widthScale` your axis code might break

Chart 4: Dynamic bar graph

> If you find something especially hard, or your code keeps breaking, just hit undo until your graph kind of works and skip to the next part or problem.

This chart should also be a bar graph using `animal-counts.csv`, but the y axis and bar widths should automatically update if we change in new data.

- Should look the same as above
- If you change the dataset to `animal-counts-2.csv`, it should still work



Hints:

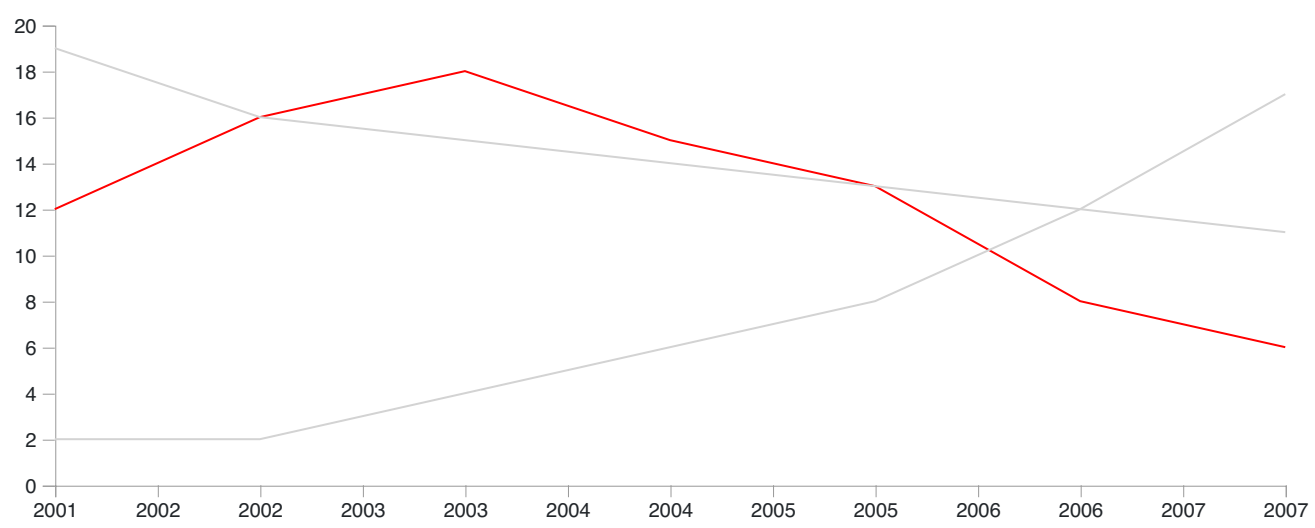
- You should probably cut and paste from the last graph, but remember to change from `chart-03` to `chart-04`
- It will probably look a little different than Chart 3, don't worry
- You'll want to update your scale domains after reading in your data
- If your bars look too long, remember D3 reads everything in as strings so you need to do a little something extra
- Test by switching between `animal-counts.csv` and `animal-counts-2.csv`

Chart 5: Line graph

> If you find something especially hard, or your code keeps breaking, just hit undo until your graph kind of works and skip to the next part or problem.

Use `product_sales.csv` to draw a line graph.

- Year is the x axis, sales is the y axis.
- The graph should be 680 pixels wide, 300 pixels tall
- The coffee line should be `red`, everything else should be `lightgrey`



Hints:

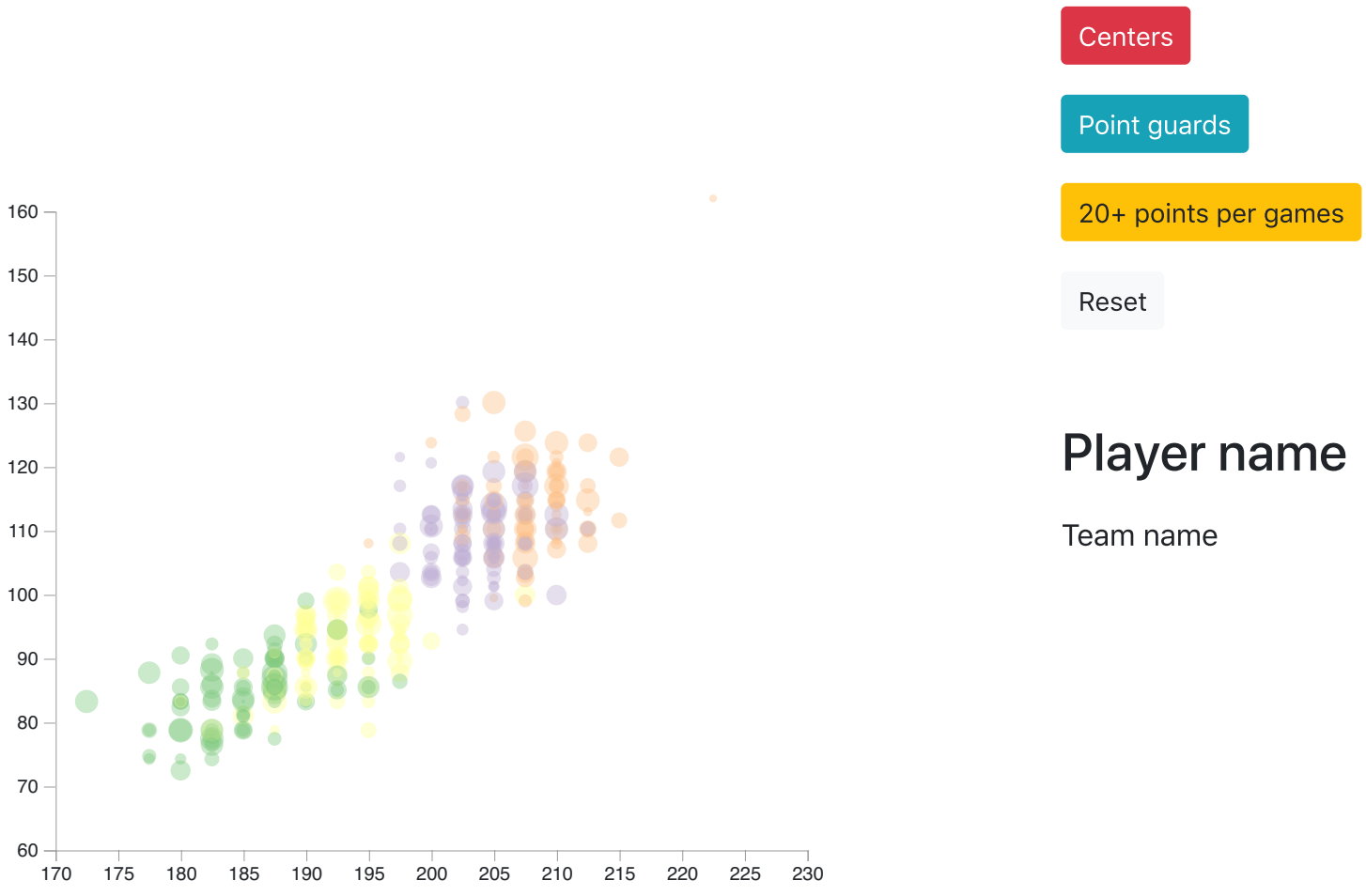
- Cut and paste all of the margin/height/width/inserting svg code from other work you've done
- You'll need to group your data
- You don't need a color scale for the coloring part

Chart 6: Interactive graphic

> If you find something especially hard, or your code keeps breaking, just hit undo until your graph kind of works and skip to the next part or problem.

Copy the code from Chart 1, and make the graphic interactive.

- Hovering over a player should put a black border around their circle
- Hovering over a player should display their name and team name to the right
- Clicking on a button should highlight those kinds of players (you can decide what that means)



Hints:

- Remember to change from `chart-01` to `chart-06`
- You'll want to make the graphic more narrow
- `hover` is **not** an event
- `Team` is the column for the team name
- You'll need to edit the HTML to be able to change the 'player name' and 'team name' sections, as well as listen for clicks on the buttons.