Cost Quest
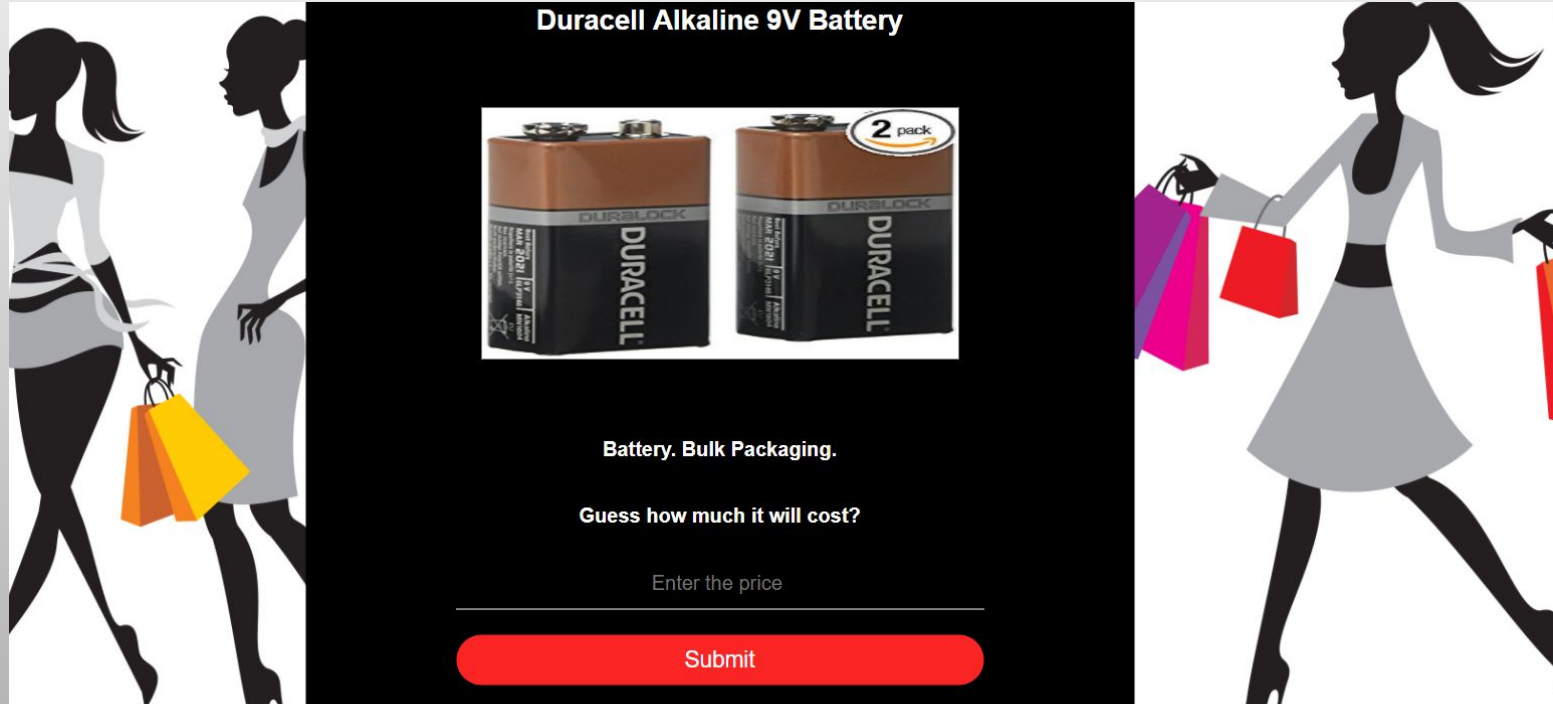
Zachary Asmussen, Rebekah Haysley, Jorge Pulido-Lopez, Theodore Margoles, Binpeng Wu, Haotian Zheng
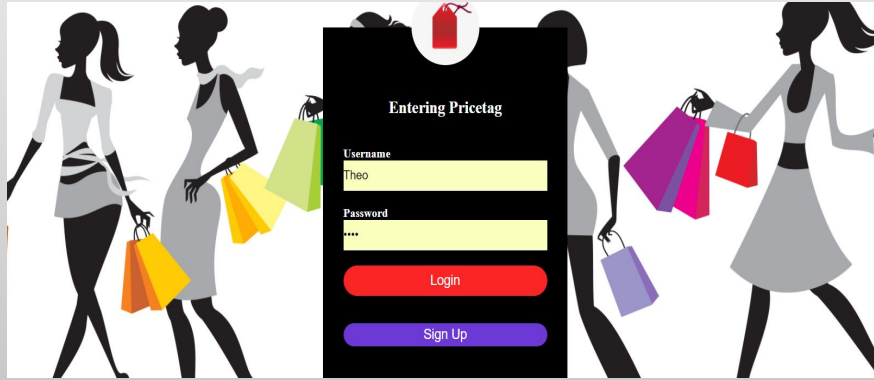
What is Cost Quest?

Duracell Alkaline 9V Battery

2 pack

Battery. Bulk Packaging.

Guess how much it will cost?

Enter the price

Submit

- Online game similar to "The Price is Right"
- Improve your high score score by correctly guessing the price of an everyday object for sale on Amazon.com
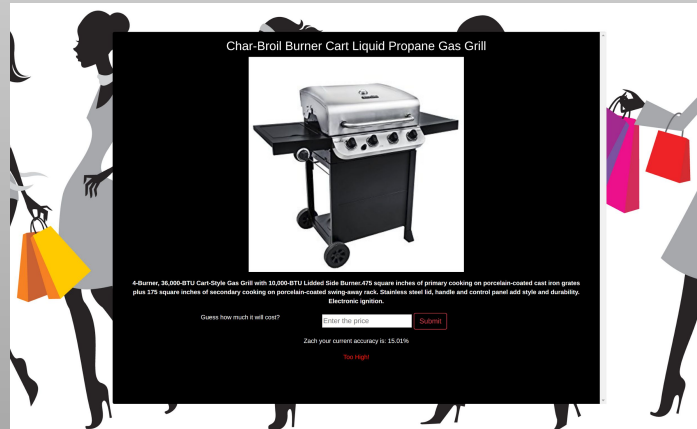
How to Play:

1. Login

Entering Pricetag

Username
Theo

Password
••••

Login

Sign Up

2. View Current Score

Welcome Theo! Your current accuracy is
-43345.07%
Play CostQuest

3. Play!

Char-Broil Burner Cart Liquid Propane Gas Grill

4-Burner, 36,000-BTU Cart-Style Gas Grill with 10,000-BTU Lidded Side Burner.475 square inches of primary cooking on porcelain-coated cast iron grates plus 175 square inches of secondary cooking on porcelain-coated swing-away rack. Stainless steel lid, handle and control panel add style and durability. Electronic ignition.

Guess how much it will cost?

Enter the price   Submit

Zach your current accuracy is: 15.01%

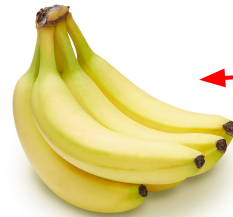Too High!

Product Database

$799.99

$499.00

$1.58

QuestProducts
- productID INT(11)
- ProductName VARCHAR(200)
- Description VARCHAR(600)
- ImageURL VARCHAR(600)
- DollarPrice VARCHAR(20)

Indexes

QuestScores
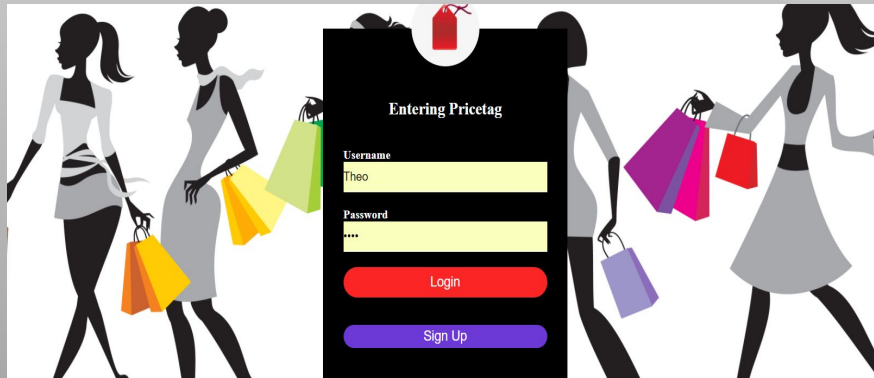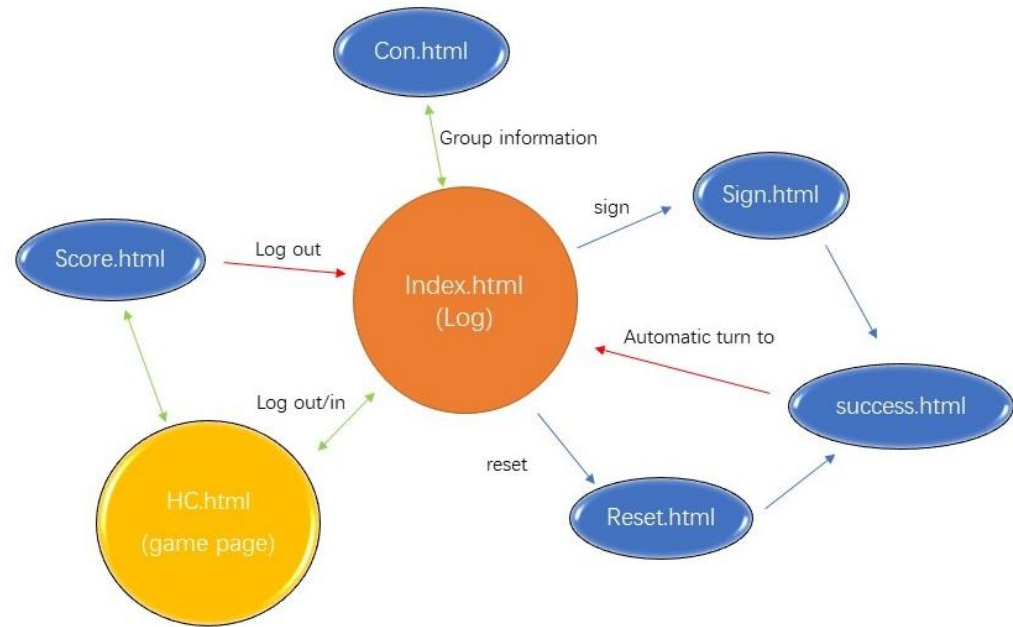- userID INT(11)
- Score FLOAT(7,2)

Indexes

QuestUsers
- userID INT(11)
- UserName VARCHAR(40)
- Email VARCHAR(200)
- Password VARCHAR(40)
- QuestScores_userID INT(11)

Indexes

4

User Interface

- Keeping it simple on login page: only (login and sign in buttons)

- Game page features include display of high score and music bgm

Index.html (Log)

Con.html — Group information

Sign.html — sign

Score.html — Log out

success.html — Automatic turn to

Reset.html — reset

HC.html (game page) — Log out/in

Entering Pricetag
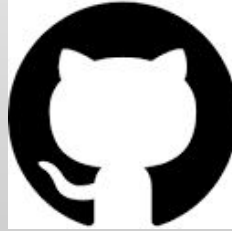
Username
Theo

Password
••••

Login

Sign Up

- Index.html: verify username and password is in database
- Sign.html: add username and password to database
- Reset.html: change password information in database
- HC html:
  - load picture, price, and product information from database
  - Compare user guess with actual price
- Score.html: load score

5

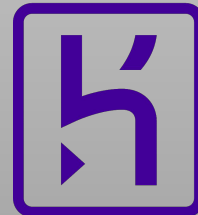# Project Tools

Project Tracker - **Trello** (*Rating*: 2 / 5)

VCS Repository - **Github** (*Rating*: 4 / 5)

Database - **MySQL** (*Rating*: 4 / 5)

Testing Tool - **PyUnit** (*Rating*: 3 / 5)

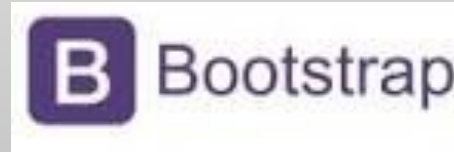Deployment Environment - **Heroku** (*Rating*: 3 / 5)

6

Project Tools

Communication - **Slack** (*Rating*: 5 / 5)

Integration - **Node.js** (*Rating*: 4 / 5)

Front End - **HTML, css, Bootstrap** (*Rating*: 4 / 5)

Planning Tool - **Gantt** (*Rating*: 2 / 5)
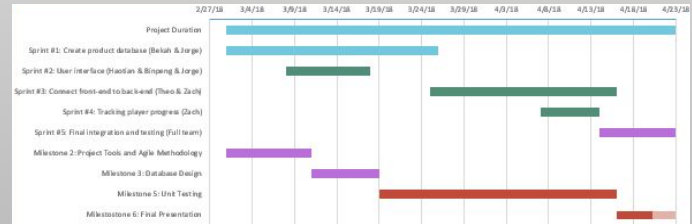
Methodologies

Agile

- Meet before lab time weekly to tag-in
- Pair programmed on tasks like front end and heroku deployment

Continuous Integration

- Separate Github branches for each task (front end, database, back end, integration)
- Pushing changes to heroku repo on daily basis.

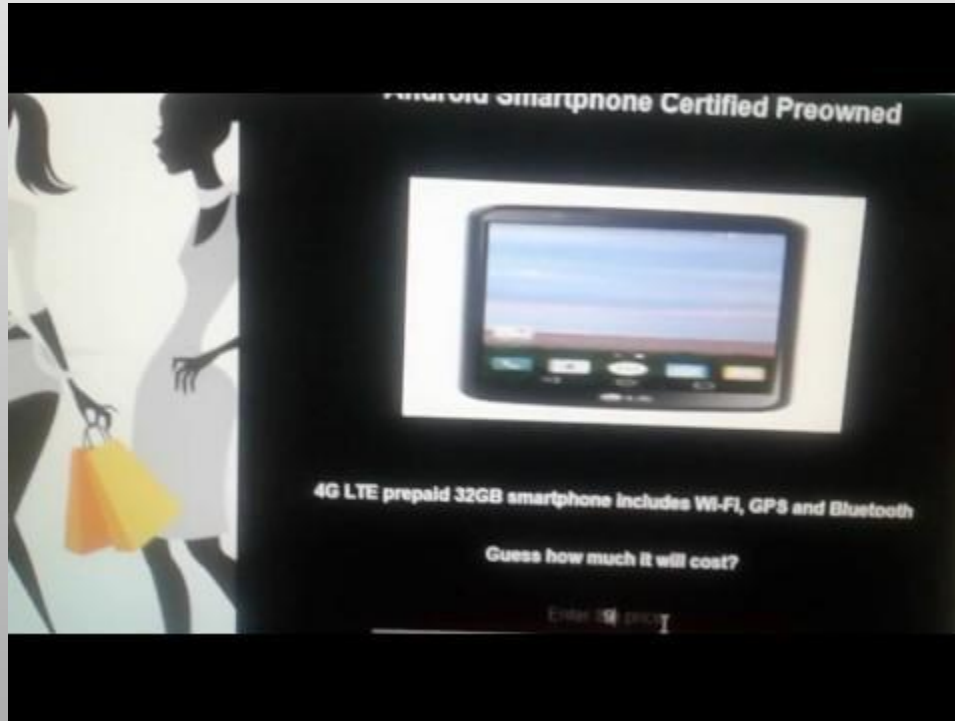| Task Name	Start Date	End Date	Duration (Days)	Days Complete	Days Remaining	Percent Complete
Project Duration	3/1/2018	5/3/2018	63	63.00	0.00	100%
Sprint #1: Create product database (Bekah & Jorge)	3/1/2018	3/26/2018	25	25.00	0.00	100%
Sprint #2: User interface (Haotian & Binpeng & Jorge)	3/8/2018	3/18/2018	10	10.00	0.00	100%
Sprint #3: Connect front-end to back-end (Theo & Zach)	3/25/2018	4/16/2018	22	22.00	0.00	100%
Sprint #4: Tracking player progress (Zach)	4/7/2018	4/14/2018	7	7.00	0.00	100%
Sprint #5: Final integration and testing (Full team)	4/14/2018	4/29/2018	15	15.00	0.00	100%
Milestone 2: Project Tools and Agile Methodology	3/1/2018	3/11/2018	10	10.00	0.00	100%
Milestone 3: Database Design	3/11/2018	3/19/2018	8	8.00	0.00	100%
Milestone 5: Unit Testing	3/19/2018	4/16/2018	28	28.00	0.00	100%
Milestostone 6: Final Presentation	4/16/2018	4/30/2018	14	4.20	9.80	30%

Challenges

- Making the user interface with all the functionality we require:
  - Creating login and submit buttons
  - Putting scoreboard on main page
  - Adding bgm to html files
- Connecting MySQL to the clearDB database and determining if we needed to use:
  - Postgres, clearDB, mongoDB,
  - Additional dependencies,
  - Change our connection scheme (pool? Single connection?)

Lessons Learned

- We initially wanted to use PHP, but we ended up using Node.js because that is what we learned in class.
    - This taught us the value of the agile methodology because we had to change our architecture on the fly.
- The use of Node.js was much more dynamic and effective than PHP, but had a learning curve which took a while
- Using mySQL hosted by clearDB directly connected to our node.js with heroku was easiest for us because it allowed us to leave 90% of our code for node.js alone and only update our config file.

Video and Live Working Demo

OLD STUFF BELOW - IGNORE

- All the tools your group used
  - Name of the tool, logo, and purpose (e.g., Project Tracking, VCS)
  - Your group's rating on how useful/good this tool/methodology was (ranked 1..5 where 5 stars is best and 1 star is useless
  - Project Management Methods used

    (Iterative, Waterfall, agile, pair programming, peer code reviews, other...)
- Expected tools
  - Project Tracker (Trello or similar)
  - VCS repository (GitHub or similar)
  - Database (MySQL or similar)
  - Testing tool (PyUnit or similar)
  - Deployment environment
- Challenges you encountered, and how you overcame them and how it may have affected your original project plans.
- Demo your project. This must be a live working demo. (We highly recommend practicing this demo beforehand.)

10 minutes long, everybody talk

Minimum of 20 pt font
Must submit PDF version of slides to github
https://moodle.cs.colorado.edu/pluginfile.php/79138/mod_resource/content/1/Milestone%206%20Requirements.pdf

Presentation organization from other teams presentations in class:

1. Introduce self with name and what your job was
2. Just do tools overview slide with the category from the writeup and the picture/rating (keep it simple - just say what tool was used for)
3. Project overview and how it works
4. Project methodology (agile) how it works, slack, how work was divided
5. Challenges
6. Key Lessons learned
7. Live demo / video