Interactive Periodic Table - Project Proposal

- Describe your application.

Interactive Periodic Table is a fully encompassed interactive desktop educational tool where users can interact with and learn from the Periodic Table!

Users will see detailed information upon hovering over the element. The IPT also allows users to dynamically update the tableview using filters so information about the element's state and group can be easily seen.

Upon choosing an element, the user takes a deep dive into viewing its Bohr model and an orbital diagram.

- What is your technology you are using?
  - HTML/CSS
  - JSON File
  - Angular2
  - Typescript
  - Electron
  - Waffle.io
  - Asar

- Wireframes
  - Landing Page:
    https://github.com/joyceky/interactive-periodic-table/blob/master/wireframes/peridic-table-view.png
  - Element Details:
    https://github.com/joyceky/interactive-periodic-table/blob/master/wireframes/element-detail-view.png

- ○ Filter View:
  https://github.com/joyceky/interactive-periodic-table/blob/master/wireframes/filter-view.png

- Project Management Tool for User Stories
  https://waffle.io/joyceky/interactive-periodic-table

- MVP Goals
  - ○ User can download IPT to their desktop.
  - ○ User can view entire Periodic Table with all 118 elements on application load.
  - ○ User can hover over the element to display more information in the information window regarding the element.
  - ○ User can click on the element to view a static Bohr model and an orbital diagram.
  - ○ Users can select filters to add colors to elements that share the same states and groups.
  - ○ Users can search elements.

- Stretch Goals
  - ○ Animated Bohr Model once user clicks on element to view more.
  - ○ Users can update JSON file from GitHub to ensure they have the most current element information.
  - ○ Users would be able to select elements to see if combining them would create a new element. Not all elements can be combined.
  - ○ Game Mode: The IPT will be grayed out and give the user hints on which element the user needs to find to test their knowledge of where the element lives on the table. Users would be able to log in and keep track of their progress. A database would be created to keep top scores of users and they would be able to view each other's scores.

- Implement a word cloud.