

Periodic Table Groups Study Game

Milestones	Assigned To	Estimated Time to Develop	Actual Time to Develop	Completed Date
Create the UI (elements, elemental groups, background, etc)	Omer Ahmer	20 mins	30 mins	11/29
Generate random periodic table elements and make them fall	Eshan Bathula	30 mins	1 hour	11/28
Code for falling obstacles with elements	Eshan Bathula	1 hour	1.5 hours	11/28
Check for collisions/damage system	Anish Shivamurthy	30 mins	30 mins	11/29
Randomizing what group the user studies	Anish Shivamurthy	20 mins	30 mins	12/2

[Link to presentation](#)

At first, we decided to make a Greenfoot game where an element abbreviation would appear on the screen and the user would have to type in the element name. But we figured that this would be too simple for this class' standards and not engaging enough. So, we decided to create another game with a similar yet different objective in which the user is responsible for controlling an avatar and hitting the labeled obstacle that matches the randomized study group (metals, metalloids, non-metals).

For this game to work, we included several components to allow for an engaging experience. We used the pictures of the periodic elements to fall down into the world so the user can see the abbreviations for it and hit it if the assigned elemental group. When the user hits too many wrong elements, damage will be counted with a damage counter and if the damage gets too high, its job is to display a huge "GO BACK TO STUDYING" message.