Biology Learning Games and Animation

CSCE 606 Software Engineering

Team Report : Iteration 3

Team Roles:

Product Owner: Prajwal Das

Scrum Master: FNU Nimisha

Developers: Shubham Gupta, Sai Harini Voruganti, Apurva Purushotama

Customer meeting date/time/place: Link to Minutes of Meetings

We had a meeting over Zoom with Dr. Walker on 11th March, 2022 to discuss progress for iteration 1, and user stories to implement for iteration 2. Further updates and discussions about the iteration were addressed over email as the meeting on April 1st,2022 was canceled.

Important Links:

GitHub repo: https://github.com/prajwaldas95/BiologyLearningGamesAndAnimations

Pivotal Tracker: https://www.pivotaltracker.com/n/projects/2556976

Slack:
https://join.slack.com/t/seproject-1oc6126/shared_invite/zt-141c9mqw1-YZvyPf_VxICrw8ThiZ63Vg

VetMed Website: https://vetmed.tamu.edu/peer/one-health/

SpreadSheet(Deployment Status):
https://docs.google.com/spreadsheets/d/10NGrOZEGldePJ_KSnpPO_ENLpEQdU_VA3r1yopvTpGY/edit#gid=0

Inventory Sheet: SpreadSheet:
https://docs.google.com/spreadsheets/d/10NGrOZEGldePJ_KSnpPO_ENLpEQdU_VA3r1yopvTpGY/edit#gid=0

Summary:

Deployment: We obtained the email address of Daniel Shuta's supervisor-(nritter@cvm.tamu.edu) and for deployment we will contact them in further iterations. We know that the deployment on Stepstone and Peer website has dependency on Daniel and Samiksha respectively. We've gone through the previous team's documentation regarding deployment tutorials and deployment will be done in the next iteration since it has dependency on people outside the team.

Testing:

As discussed with Prof. Walker, the testing would be done manually.

There is no need for a design diagram as the biology animation games are small animations of their own.

Status:

User Story	Status (Not started/Started/Developed/Deployed/Completed)
1.Infectious diseases module - Knowledge Check: What are the data?	**Developed**
2. Infectious diseases module - Knowledge Check: Which axis is the right?	**Developed**
3. Infectious diseases module - Knowledge Check: Name that variable	**Developed**
4. Infectious diseases module - Knowledge Check : Calculate the Value	**Developed**
5. Testing of Sprint 1 user stories locally and on Stepstone testing environment	**Completed**
6. Clinical Trial module - Hypothesize Knowledge Check	**Developed**
7. Clinical Trial module - Identify the Variables	**Developed**
8. Clinical Trial module - Prove that you are a scientific method expert!	**Developed**
9. Clinical Trial module - Organize the	**Developed**

Details of Clinical Trial Phases	
10. Clinical Trial module - Think about it	**Developed**
11. Clinical Trial module - Did you grasp the concepts?	**Developed**
12. Clinical Trial module - Can you count the costs?	**Developed**
13. Ecology module - Ecological Succession Knowledge Check	**Developed**
14. Ecology module - Producers Knowledge Check	**Developed**
15. Ecology module - Living or Non-Living Knowledge Check	**Developed**
16. Stress module - Label the Neuron	**Not started**
17. Stress module - Keep it in Balance	**Not started**
18. Stress module - Can You Sense the Answers	**Not started**
19. Inventory Check : Mapping existing animations which have bugs and needs to be fixed	**Completed**
20. Inventory Check : Mapping new animations to be developed	**Completed**

For this iteration 2, we picked the following user stories:

UserStory No. 6: “Develop Clinical Trial module - Hypothesize Knowledge Check”

UserStory No. 7: “Develop Clinical Trial module -Identify the Variables”

UserStory No. 8: “Develop Clinical Trial module - Prove that you are a scientific method expert!”

UserStory No. 10: “Develop Clinical Trial module - Think about it”

UserStory No. 11: “Develop Clinical Trial module - Did you grasp the concepts?”

In this iteration, we have focused on developing new animations for the “Clinical Trial module”. With that, all the animations for that module will be developed to work on Wordpress and Stepstone.

User Stories:

1. **[Prajwal: 3 pts] Feature** - *UserStory No. 6*: Develop Clinical Trial module - Hypothesize Knowledge Check

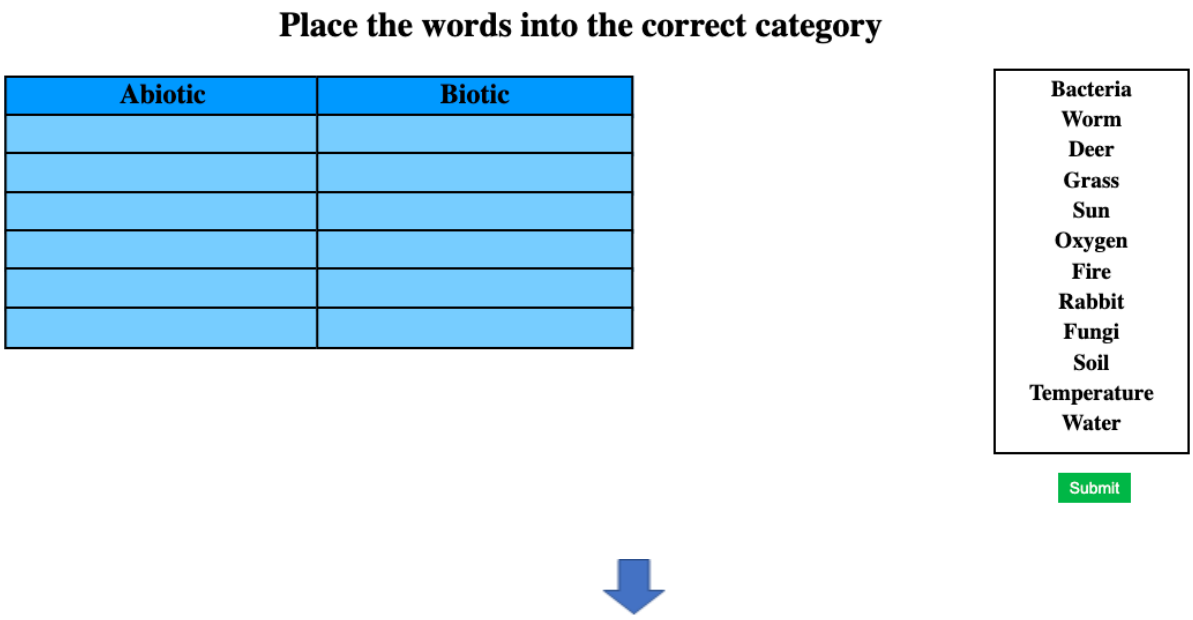
    As an Instructor

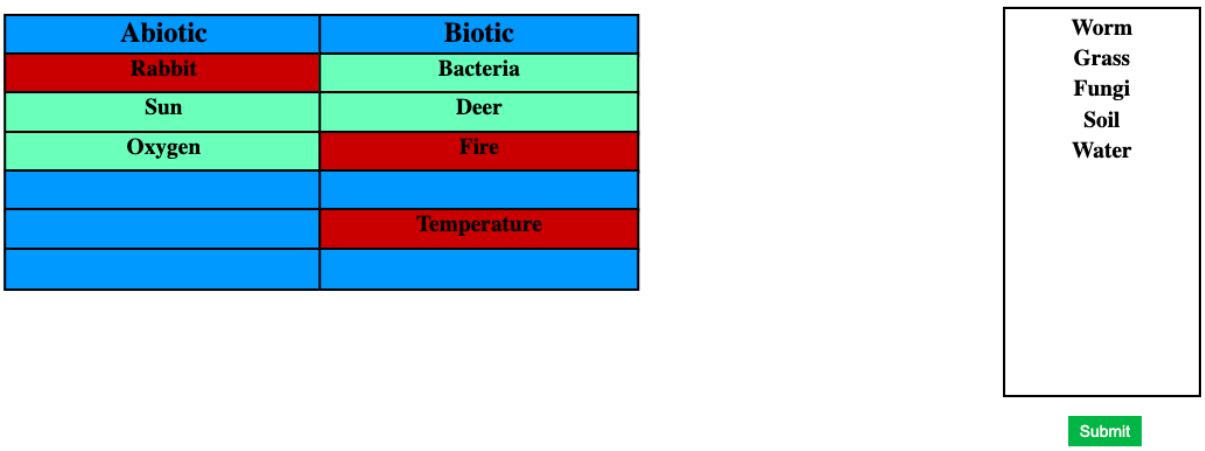
    I want the students to use interactive animations for the Clinical Trial module - Hypothesize Knowledge Check

    So that the students can understand the concepts better.

Progress: Developed

Design diagram:





Explanation:

We have developed a drag and drag animation for the slide ''Living or Non-Living Knowledge Check?'' from the Ecology module. The Student has to drag the answers from the ''Answers'' box and place them onto the correct boxes corresponding to Biotic and Abiotic.

Respective prompts are shown depending on the questions that the students get right.

The answers and the background photos are parametrized so that the code is easy to maintain and modify in the future. The animation has been developed such that resizing the window doesn't affect the working of the animation and it is also compatible with touch devices.

The color combinations, fonts and image sizes are chosen keeping accessibility in mind.

2. **[Apurva: 3 pts] Feature -** *UserStory No. 8*: Develop Clinical Trial module - Prove that you are a scientific method expert!

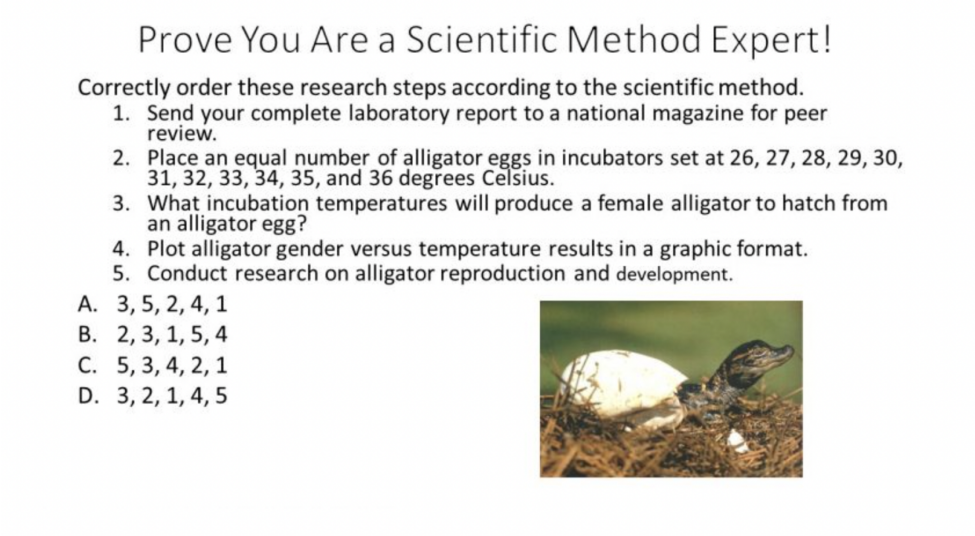
   As an Instructor

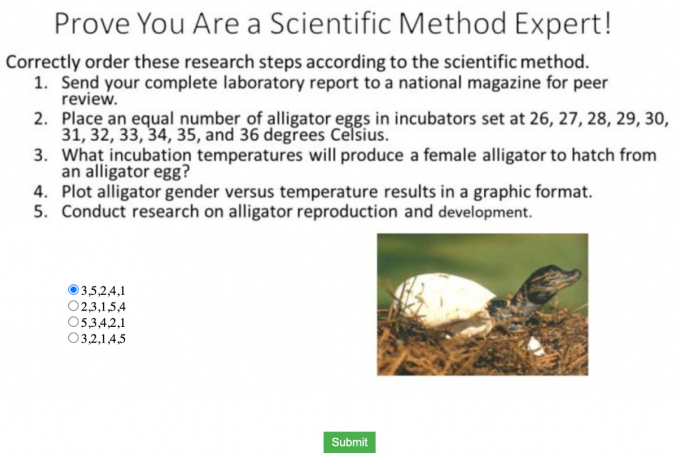
   I want the students to use interactive animations for the Clinical Trial module - Prove that you are a scientific method expert!

   So that the students can understand the concepts better.

Progress: Developed

Design diagram:





Explanation:

We have developed a drag and drag animation for the slide “Prove that you are a scientific method expert!” from the Clinical Trials module. The Student has to select the correct answer which represents the order of research steps. Radio buttons are used for selecting the answer. Respective prompts are shown depending on the questions that the students get right.

The answers and the background photos are parametrized so that the code is easy to maintain and modify in the future. The animation has been developed such that resizing the window doesn’t affect the working of the animation and it is also compatible with touch devices.

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3. **[Sai Harini Voruganti: 3 pts] Feature** - *UserStory No. 7*: Develop Clinical Trial module - Identify the variables?

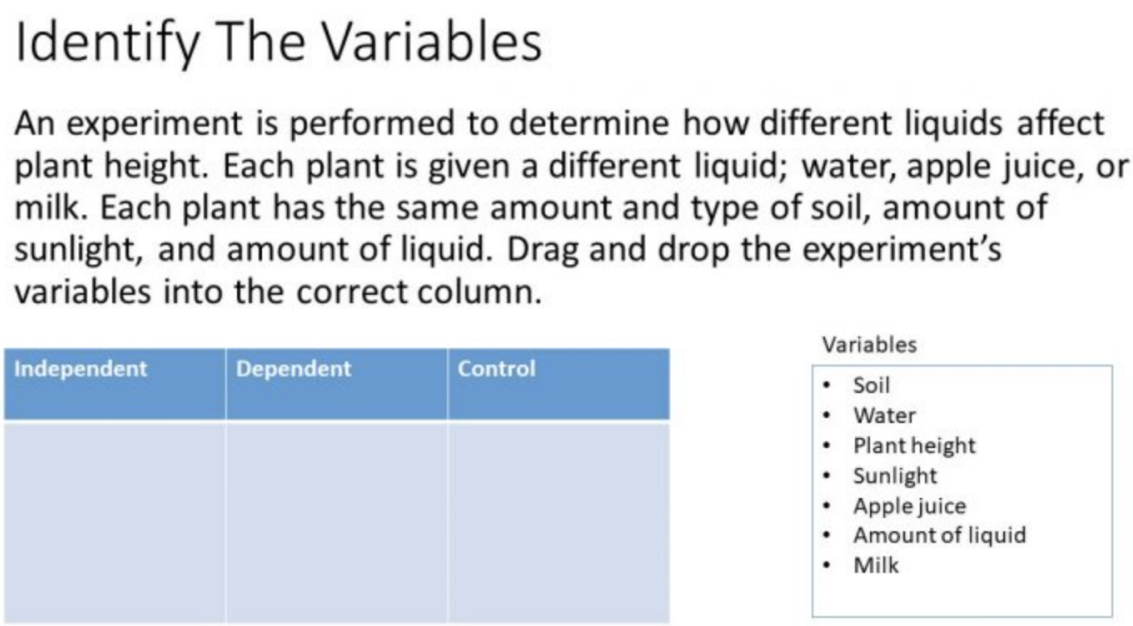
   As an Instructor

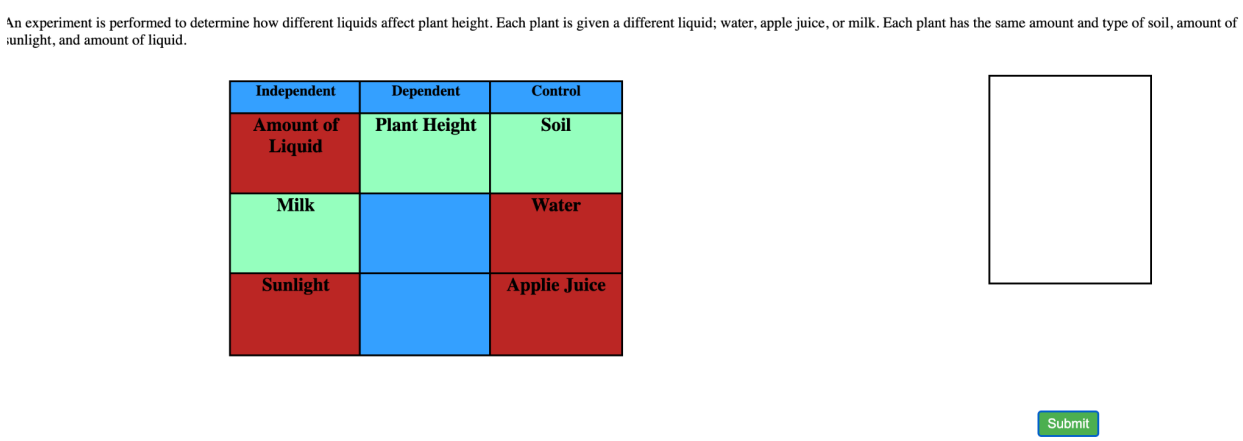
   I want the students to use interactive animations for the Clinical Trial module - Identify the variables?

   So that the students can understand the concepts better.

Progress: Developed

Design diagram:





Explanation:

We have developed a drag and drop animation for the slide “Identify the variables?” from the Clinical Trial module. The Student has to drag the answers from the “Answers” box and place them onto the correct boxes and click on the submit button to check their answers.

Respective prompts are shown depending on the questions that the students get right.

The answers and the background photos are parametrized so that the code is easy to maintain and modify in the future. The animation has been developed such that resizing the window doesn’t affect the working of the animation and it is also compatible with touch devices.

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4. **[Nimisha: 3 pts] Feature -** *UserStory No. 10***:** Develop Clinical Trial module - Think about it

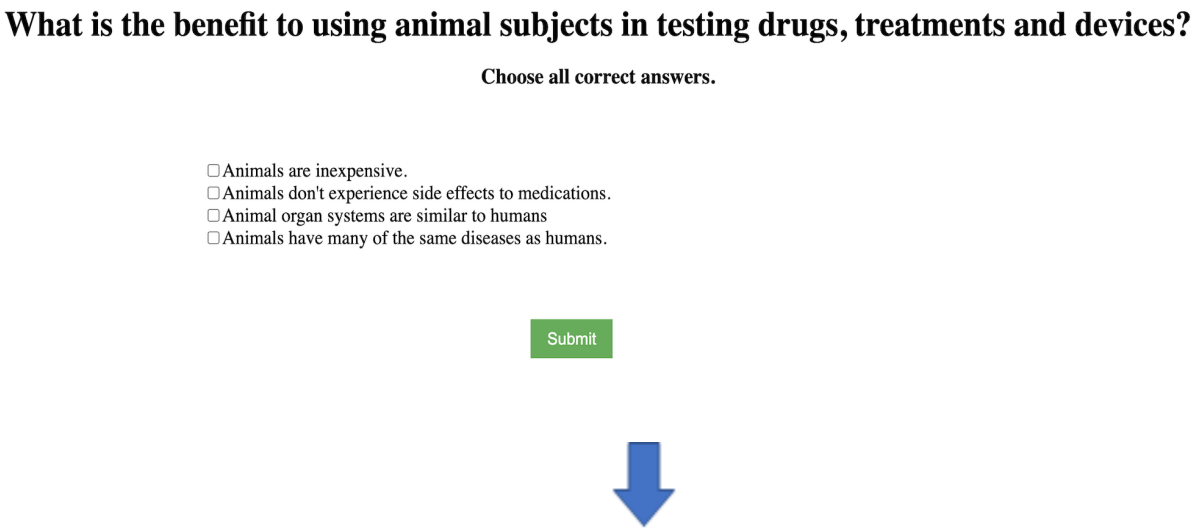
   As an Instructor

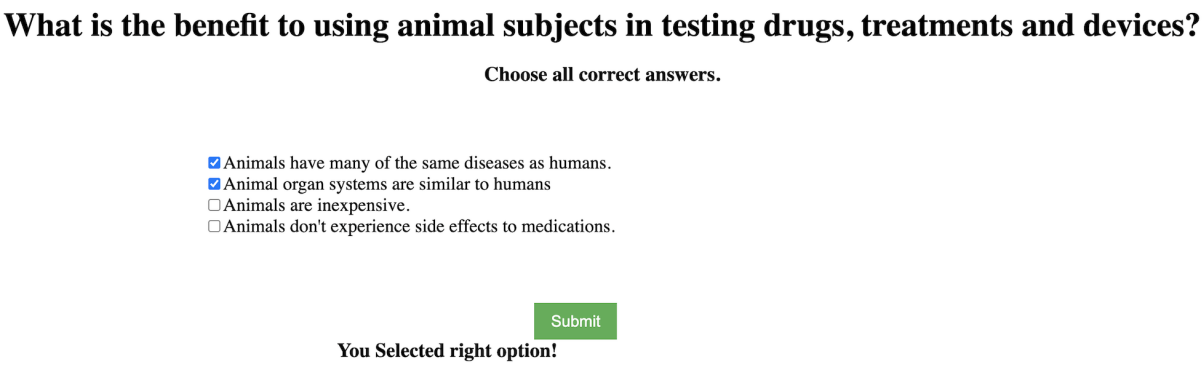
   I want the students to use interactive animations for the Clinical Trial module - Think about it

   So that the students can understand the concepts better.

Progress: Developed

Design diagram:





Explanation:

We have developed a checkbox select animation for the slide “Think about it” from the Clinical Trial module. The Student has to select the checkboxes for the correct answers from the various options listed. The student has to click on the submit button to check their answers. The answer options are shuffled on each page refresh so that the students don’t memorize the correct answer sequence.

Respective prompts are shown depending on the questions that the students get right.

The answers and the background photos are parametrized so that the code is easy to maintain and modify in the future. The animation has been developed such that resizing the window doesn’t affect the working of the animation and it is also compatible with touch devices.

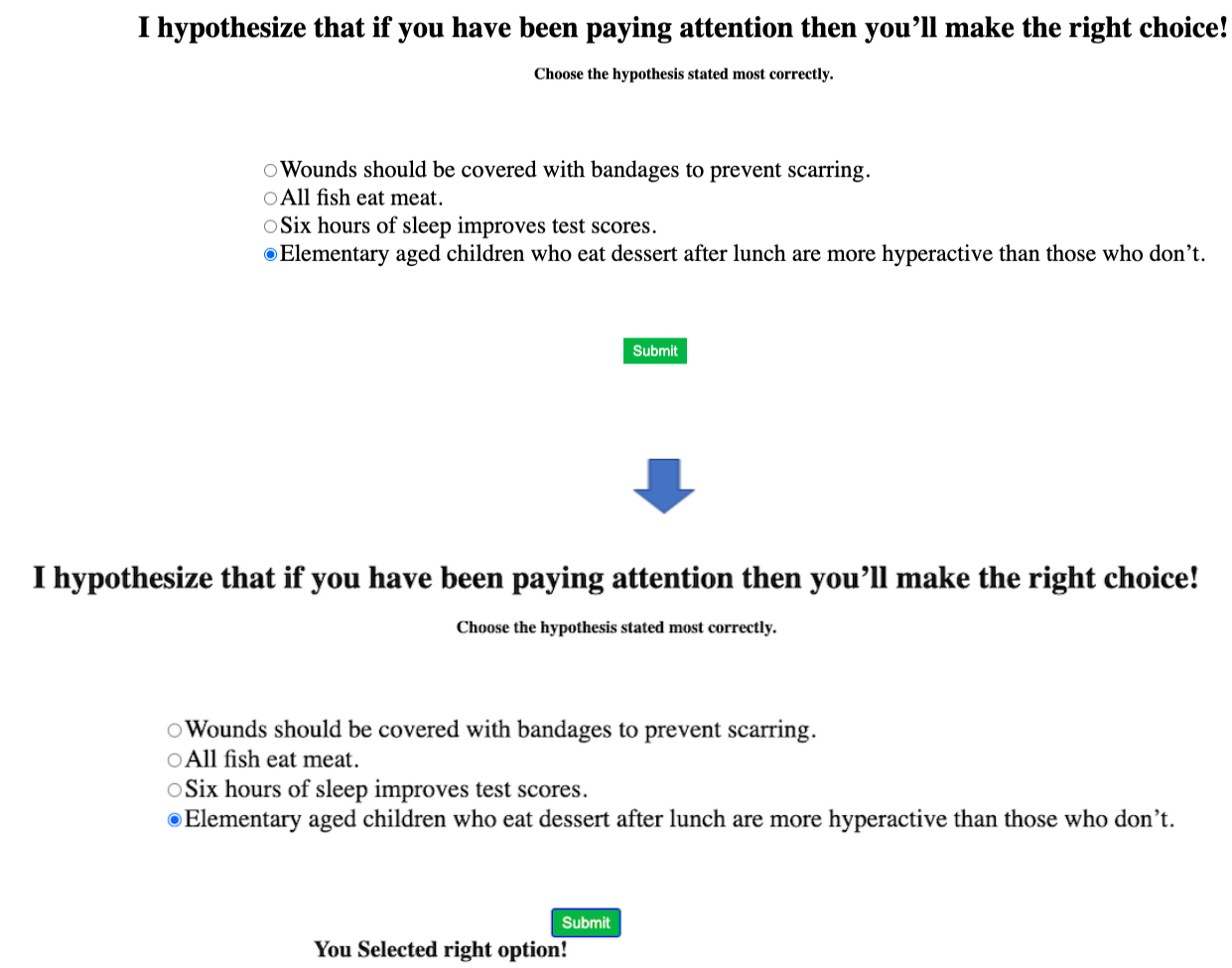
The color combinations, fonts and image sizes are chosen keeping accessibility in mind.

5. **[Shubham: 3 pts] Feature -** *UserStory No. 9*: Develop Clinical Trial module - Hypothesize Knowledge Check

   As an Instructor

   I want the students to use interactive animations for the Clinical Trial module - Hypothesize Knowledge Check

   So that the students can understand the concepts better.



Progress: Developed

Design diagram:

Explanation:

We have developed a checkbox select animation for the slide "Hypothesize Knowledge Check" from the Clinical Trial module. The Student has to select the checkboxes for the correct answers from the various options listed. The student has to click on the submit button to check their answers. The answer options are shuffled on each page refresh so that the students don't memorize the correct answer sequence.

Respective prompts are shown depending on the questions that the students get right.

The answers and the background photos are parametrized so that the code is easy to maintain and modify in the future. The animation has been developed such that resizing the window doesn't affect the working of the animation and it is also compatible with touch devices.

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Code Quality Report:

(1) **Entire Project :**The detailed report is also available here

(2) **User Stories picked up in this iteration:** The detailed reports for user stories picked up by each developer can be found here.