

Software Systems Development

Centre Number: 71348

Candidate Number: 0075

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Introduction

Background

My AS science teacher within North Coast Integrated College has recently asked me if I could create a game with the intent to help younger pupils revise the topic of space and the world around us for upcoming exams. Students have commonly complained about how boring revision is, that they dislike staring at a page to learn, finding it boring and ineffective. This is why I have decided to make an interactive quiz that will test their knowledge through the use of several questions of different difficulty, while also keeping them entertained by letting them interact with the game.

To connect the player, I will start the quiz by presenting them with an opportunity to login, and also select a character from one of the four images that I will have pre-selected. After selecting a difficulty, a timer should start that will then count the time that it takes the player to complete the quiz. Finally there I want to implement a simple scoring system where the player is given a point for every question that they get right. I want to add these features to try and make the game seem more competitive.

I want to make the quiz reach as wide of an audience as possible, so I will try and add two different difficulties, of beginner and intermediate.

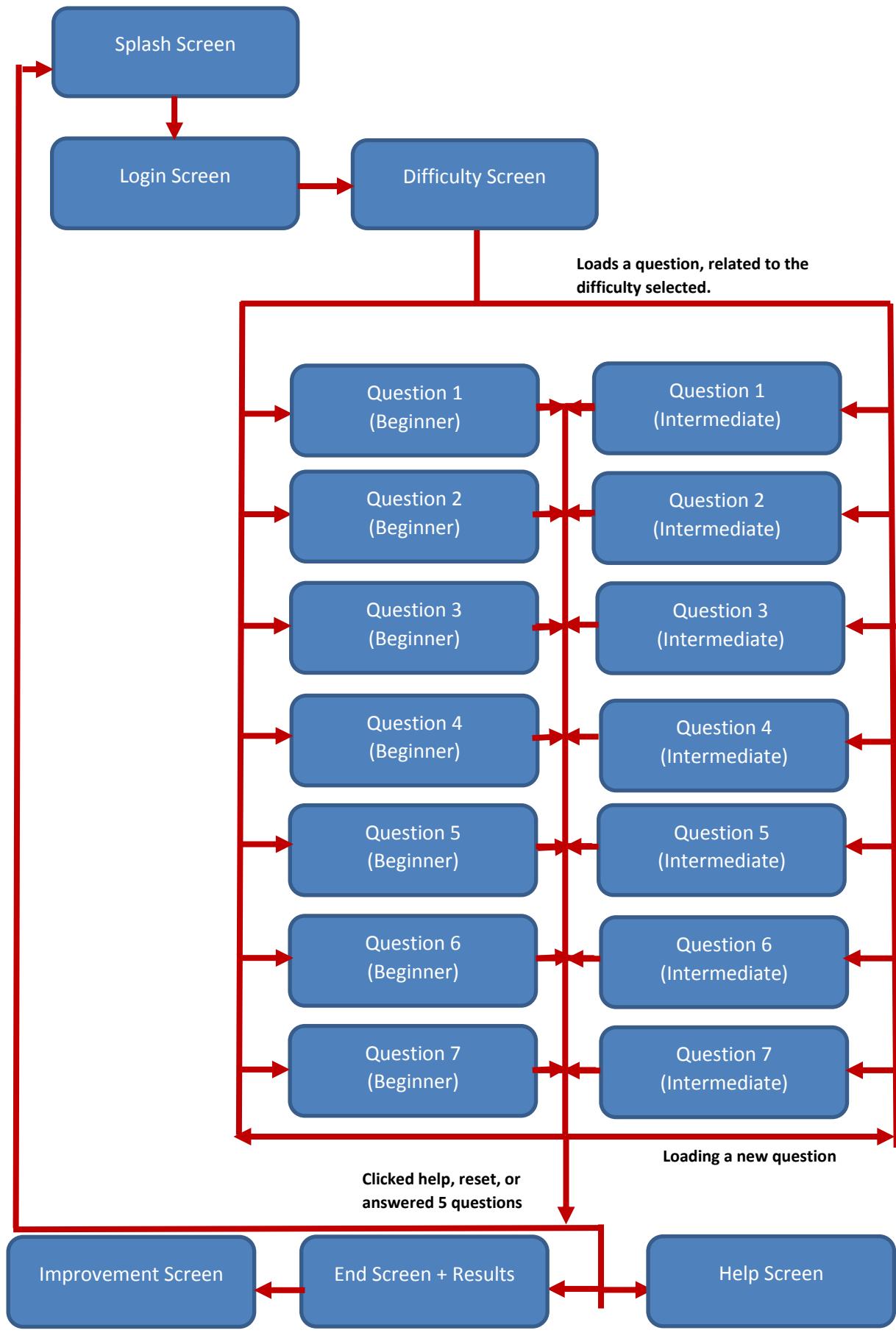
The main reason that I am making this game is to introduce a learning technique that is more entertaining. To do this I will have to ensure that the game is as interactive as possible, this includes several different question features such as drag-and-drop, multiple choice and also using textboxes.

User Requirements

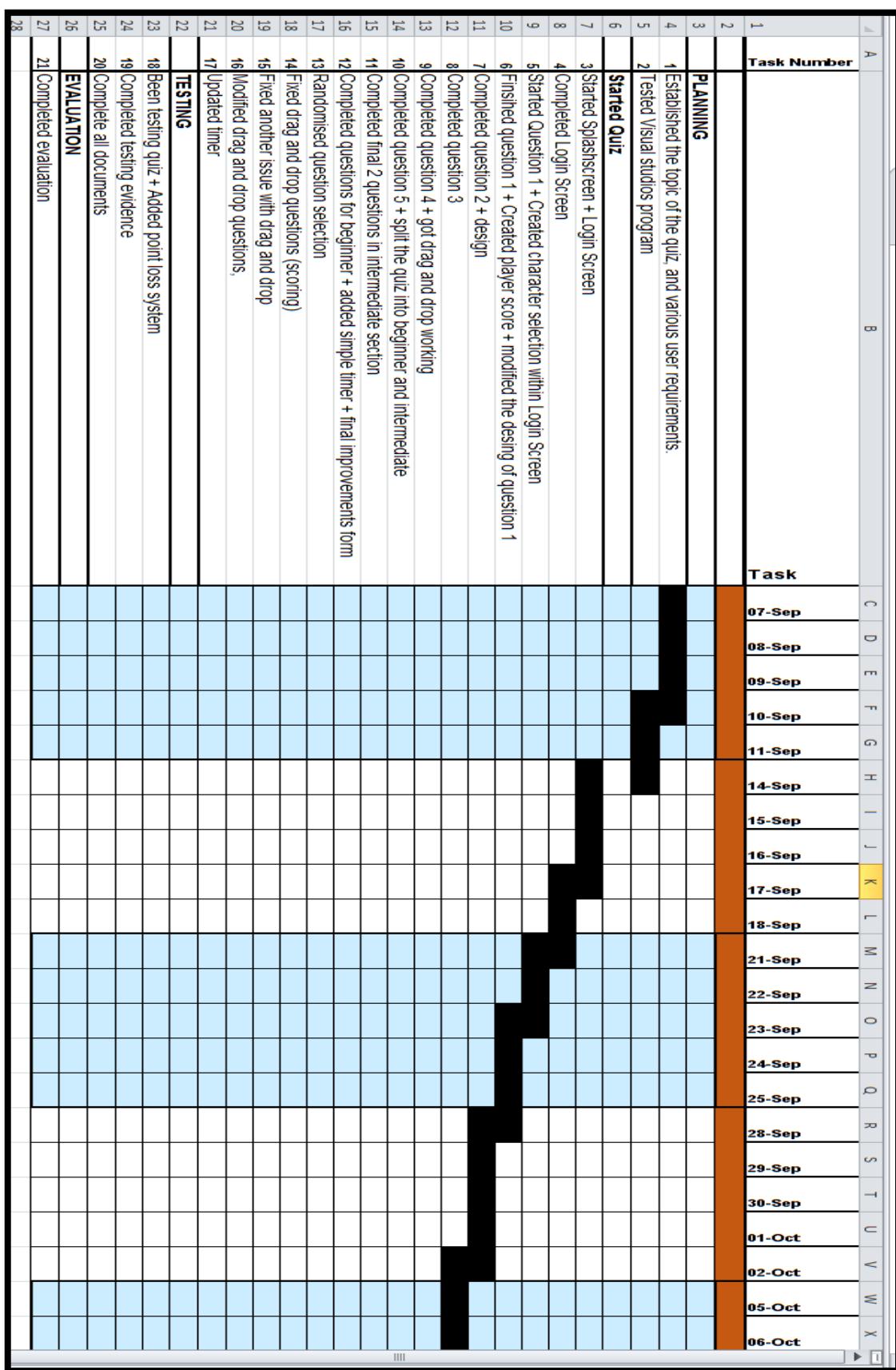
The user requirements of this game are the guidelines that have been set to me by my science Teacher. She has asked me to ensure that:

- The purpose, for which I am making this game, is to provide students with an entertaining and fun way of revising space and the Earth around us for science.
- I have decided that I am going to make the quiz focus around the topic of Space and Our environment; this means that I want to have the questions relate to the planets, theories and the environment.
- I have set a few simple guidelines for myself when I begin making the quiz, I am it to be;
 - User friendly,
 - Neatly laid out,
 - Somewhat challenging,
 - Visually appealing,
 - Interesting to complete,
 - A good revision tool.
- I want the quiz to include several different graphics to help make the quiz look much more appealing, while also helping get specific points across.
- Due to the fact that I don't want this quiz to be repetitive and boring, I have decided that I will have to include several different questions, an example of what I want to include in the quiz is; Drag and Drop, multiple choice and drop-down.
- Another important feature which I feel is necessary to add is a help feature, I want users to be able to access this from anywhere within the quiz, and also want it to contain helpful information.
- To make the quiz seem more interactive, I have decided that I am going to include a login system where users can enter their own names. On top of this, I also want to include a character system, where users can select from a list of character images, which will then be displayed throughout the quiz.
- It has also been brought to my attention that it might be beneficial to add two different difficulty settings so that users can answer easier questions to begin with. In doing this I believe that I will likely use similar questions, however the beginner section will likely contain more drag and drop, or multiple choice questions.
- One of the final features which I believe would work nicely within this quiz is a character score and timer. This would help make the quiz somewhat more competitive, which could possibly encourage users to try harder each time they complete the quiz.

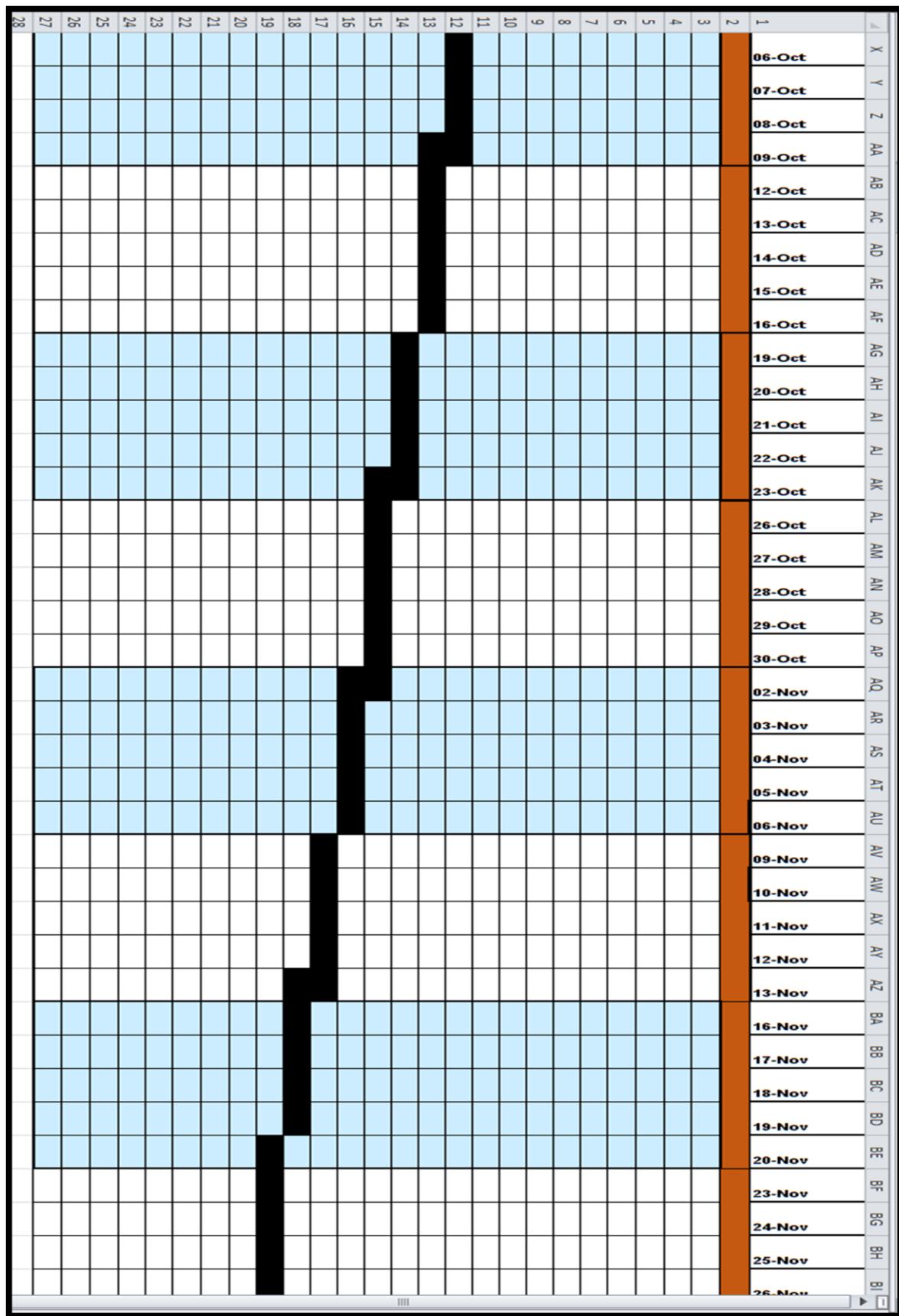
Quiz map



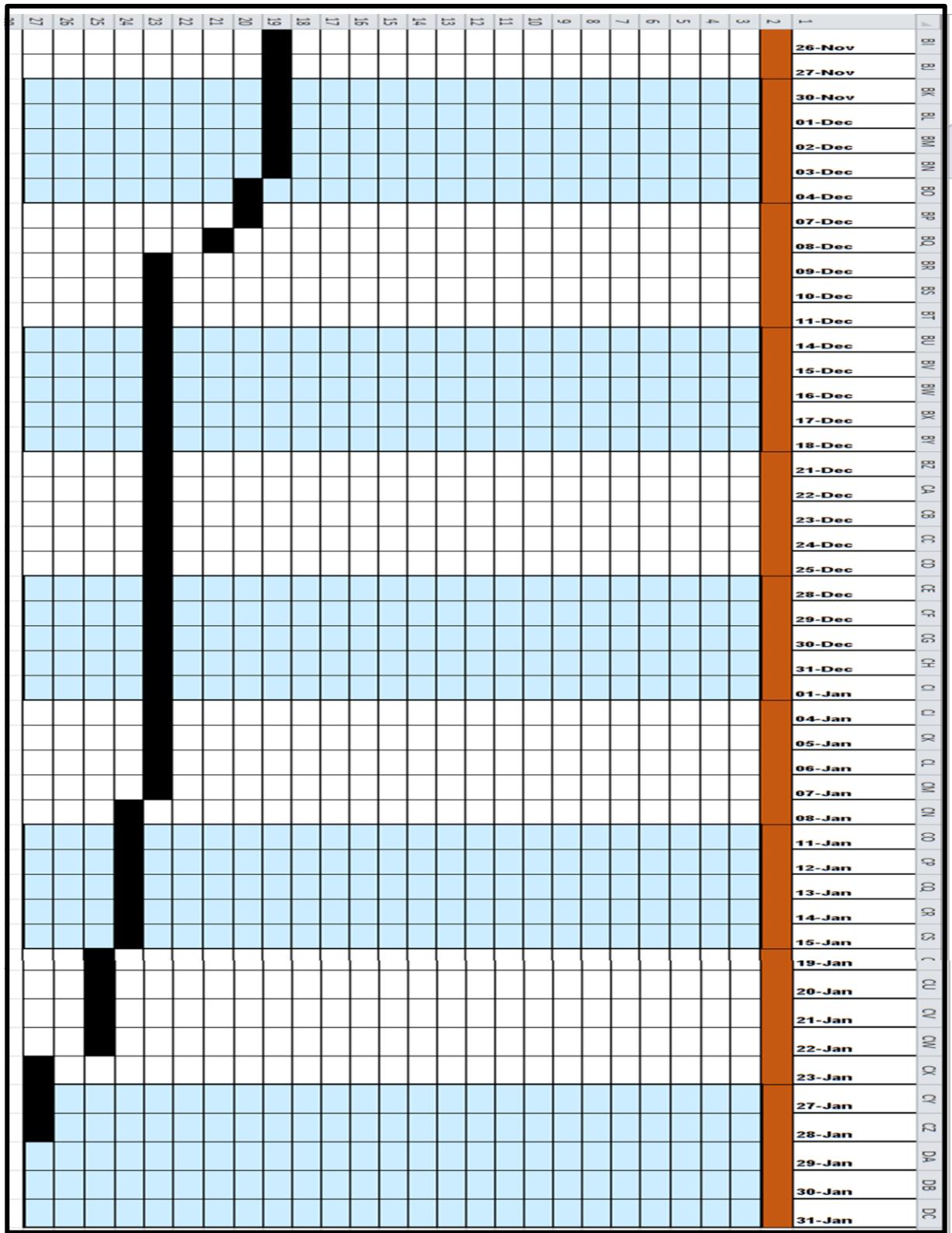
GANTT chart



Software systems



Software systems



Project Plan

Task Number	Task	Date Started	Comments	Date Completed
	PLANNING			
1	Established the topic of the quiz, and various user requirements	7 th September 2015	I talked to my science teacher who told me that they wanted a space quiz, and provided various requirements.	10 th September 2015
2	Completed testing with Visual studios program	10 th September 2015		13 th September 2015
	BEGIN Quiz			
3	Started Splash screen + Login Screen.	13 th September 2015		17 th September 2015
4	Completed Login Screen.	17 th September 2015		21 st September 2015
5	Started Question 1 + Created character selection within Login Screen.	21 st September 2015	For this section of the quiz, I have made the decision to add a login feature.	23 rd September 2015
6	Finished Question 1 + Created player score + modified the design of question 1.	23 rd September 2015		28 th September 2015
7	Completed Question 2 + design. Completed Question 3.	28 th September 2015		2 nd October 2015 9 th October

8		2 nd October 2015		2015
9	Completed Question 4 + got drag and drop to work.	9 th October 2015		16 th October 2015
10	Completed Question 5 + Split the quiz into beginner and intermediate.	16 th October 2015	My teacher recommended that I split my quiz into two different sections. I thought that this would be a fantastic idea.	19 th October 2015
11	Completed the final 2 Questions in intermediate section.	19 th October 2015		23 rd October 2015
12	Completed Questions for beginner + added simple timer + Final improvements form.	23 rd October 2015		2 nd November 2015
13	Randomised question selections.	2 nd November 2015	My teacher recently suggested that I implement a system which caused the questions to open in a random order.	6 th November 2015
14	Fixed drag and drop Questions (Scoring)	9 th November 2015		13 th November 2015
15	Once again Fixed drag and drop Questions.	13 th November 2015		17 th November 2015

16	Modified drag and drop questions.	20 th November 2015		3 rd December 2015
17	Updated timer.	8 th December 2015	I updated the time within the quiz, to make it easier to read and more exact.	8 th December 2015
TESTING				
18	Been testing quiz + Added point loss system	8 th December 2015	To complete this unit, I have been working on the documents needed.	7 th January 2016
19	Completed testing evidence	8 th January 2016		14 th January 2016
20	Complete all documents	19 th January 2016		22 nd January 2016
Evaluation				
21	Completed evaluation	22 nd January 2016		28 th January 2016

Designs

Initial designs

Questions plan

Software Systems Design drafts

Question Bank (beginner)

Q1) How many planets are in our solar system?
(Including pluto)

- 8 x
- 9 ✓
- 12 x
- 10 x

Q2) Are the following statements true or false?
Drag the correct statement to the lines within the boxes

The Earth orbits the sun	True
The sun is the closest planet to the Earth	False
Our solar system is named after a chocolate bar	False
The sun is a star	True
The moon is a satellite	True
When the moon blocks the sun, it is a solar eclipse.	True
Gravity is a man-made force	False
It is impossible for a sun to die.	False

Q3) Drag and drop the planets onto the correct white box

Mars (Second white box)

Neptune (Fifth white box)

Venus (First white box)

Uranus (Fourth white box)

Jupiter (Third white box)

Software systems

Q4) Why is the sun located at the centre of our solar system?

- Merely by chance, any planet could take its place.
- The sun has the largest mass of any object in our solar system.
- The sun isn't, the earth is...
- Aliens?

Q5) What direction does the sun raise from?

- East
- West

Q6) Fossil fuels are largely to blame for global warming

Which of the below can be classified as fossil fuels?

- Uranium X
 - Natural gases ✓
 - Oil ✓
 - Charcoal X
 - Coal ✓
 - Bio-fuel X
- (Player ticks correct 3 answers)

Q7) Select the correct answers below

What is the name of Saturn's largest moon?

Titan ✓
Olympus X
Neptune X

What solar system is the Earth located within?

The Terrasysteme X
The Helios X
The milkyway ✓

what is the name of the force which holds us to the Earth?

- | |
|------------------|
| Magnets x |
| The atmosphere x |
| Gravity ✓ |

Question Bank (Intermediate)

(Q1) What is the name of the star located at the centre of our solar system?

- Sol ✓
- Kastra x
- Capella x
- Mira x

(Q2) choose the answers which complete the sentence.

Space is a

sink x
Vacuum ✓
Mop x

. This means that there is no

Nitrogen x
water molecules x
Oxygen ✓

in space. Due to these circumstances

sound ✓
Heat x
Light x

cannot travel through

space.

(Q3) Global warming.

This is caused primarily by the excessive burning of

Fossil

 fuels.

These gases gather within the Earth's

Atmosphere

.

This causes it to thicken, causing more

Heat

 is trapped, increasing the temperature of the world.

Q4) Which of the following statements are true?

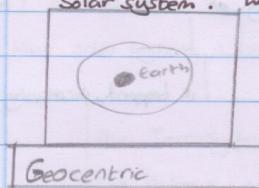
- ~~Global warming is caused by increasing Earth's temperatures.~~
- Global warming causes the ice caps to melt. ✓
- Nuclear waste harms the environment. ✓
- Fossil fuels are good for the environment. X
- Spraying lots of aerosols slow the progress of global warming. X
- Cutting down trees helps the atmosphere. X
- Nuclear waste can be used to speed plant growth. X
- Bio-fuels are more environmental friendly. ✓
- ~~Recycling is good for the environment.~~ ✓

(the player must select A.)

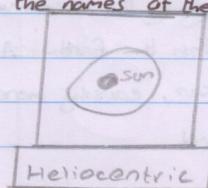
Q5) Drag and drop the planets onto the correct white square.

- Sun
- Jupiter (5th box)
- Mars (4th box)
- Neptune (8th box)
- Mercury (1st box)
- Pluto (9th box)
- Saturn (7th box)
- Earth (3rd box)
- Venus (2nd box)
- Uranus (6th box)

Q6) There is a term used to define the position of the planets within our solar system. What are the names of the diagrams below?

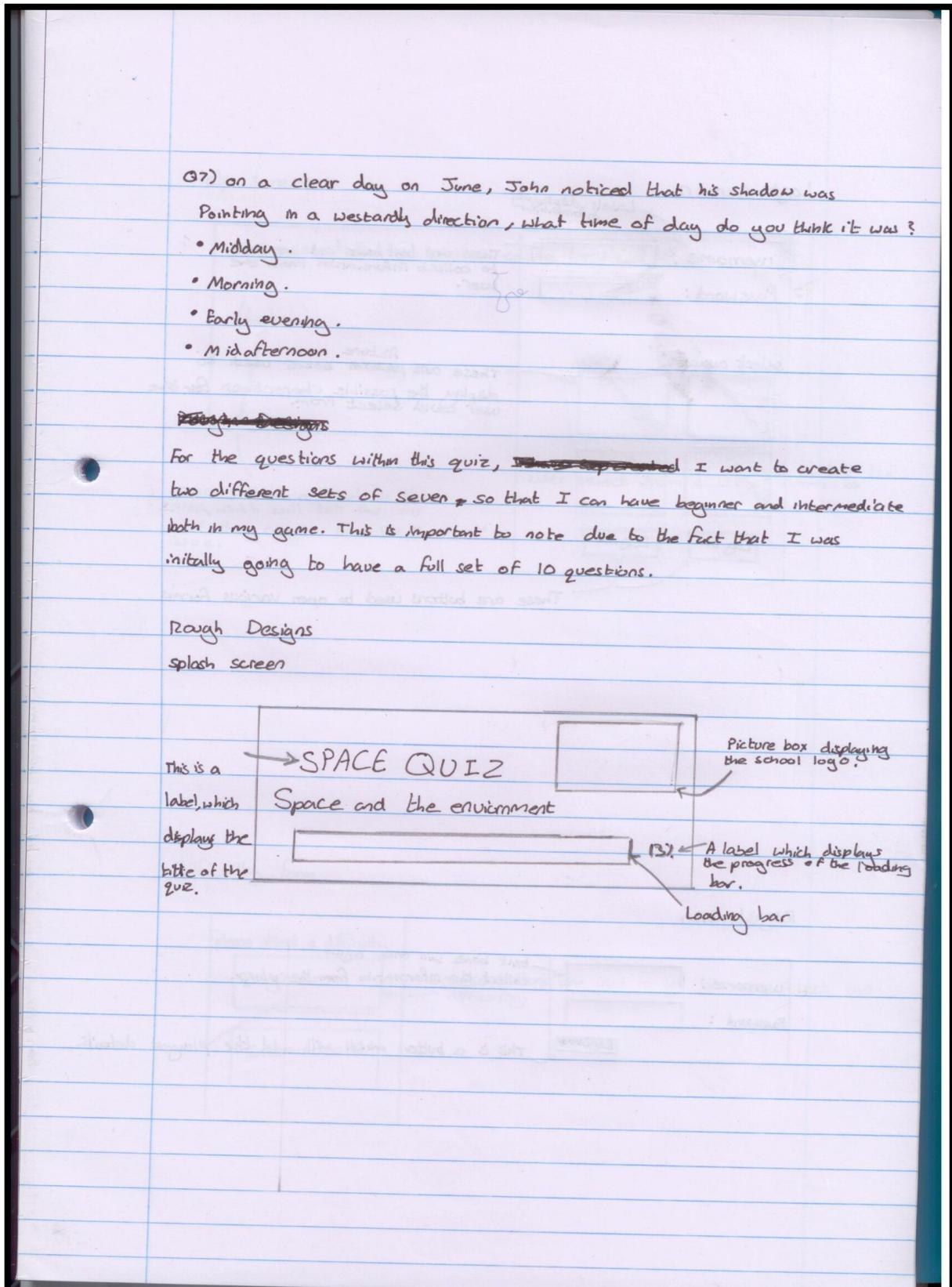


Geocentric

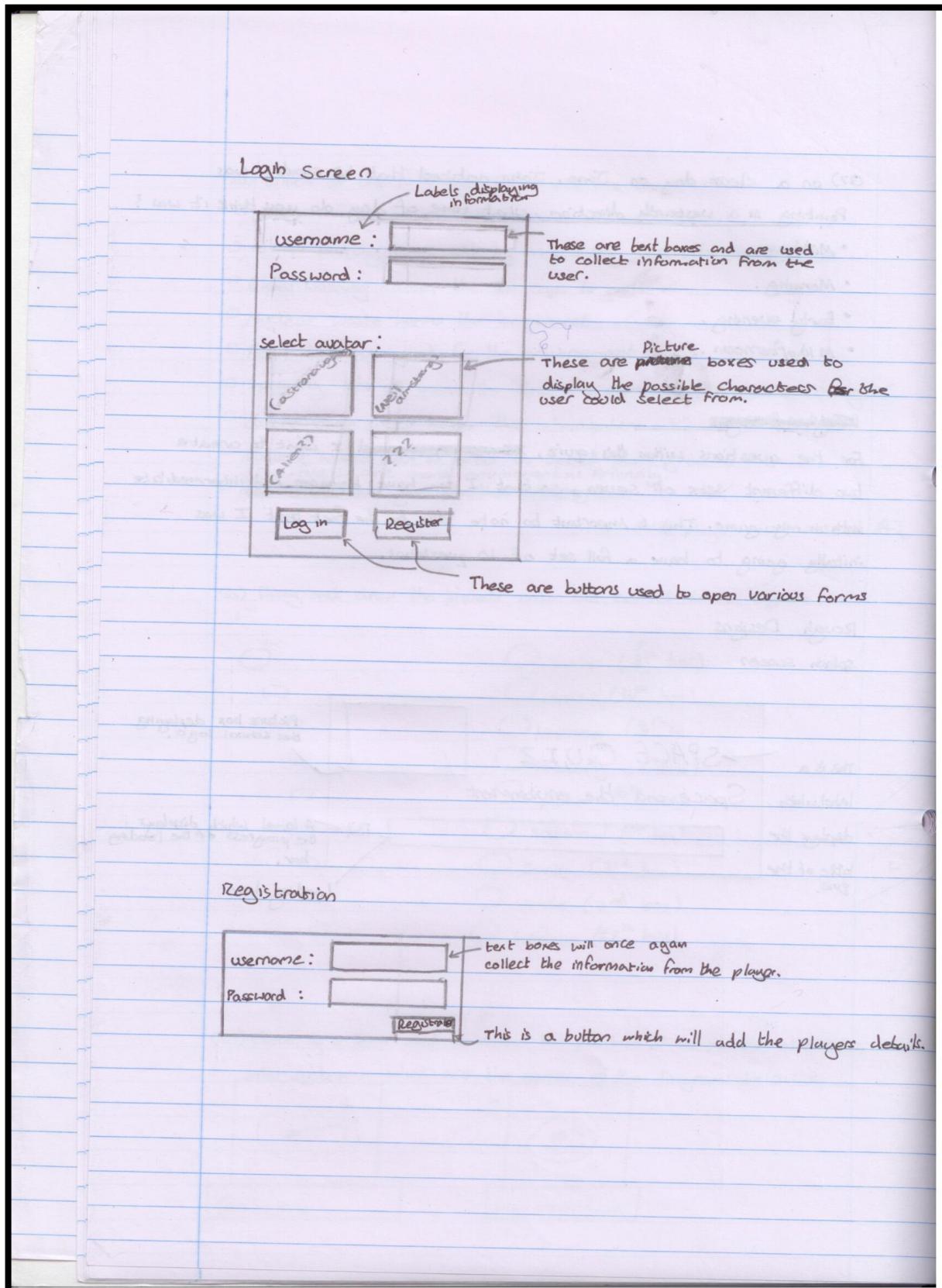


Heliocentric

Splash Screen

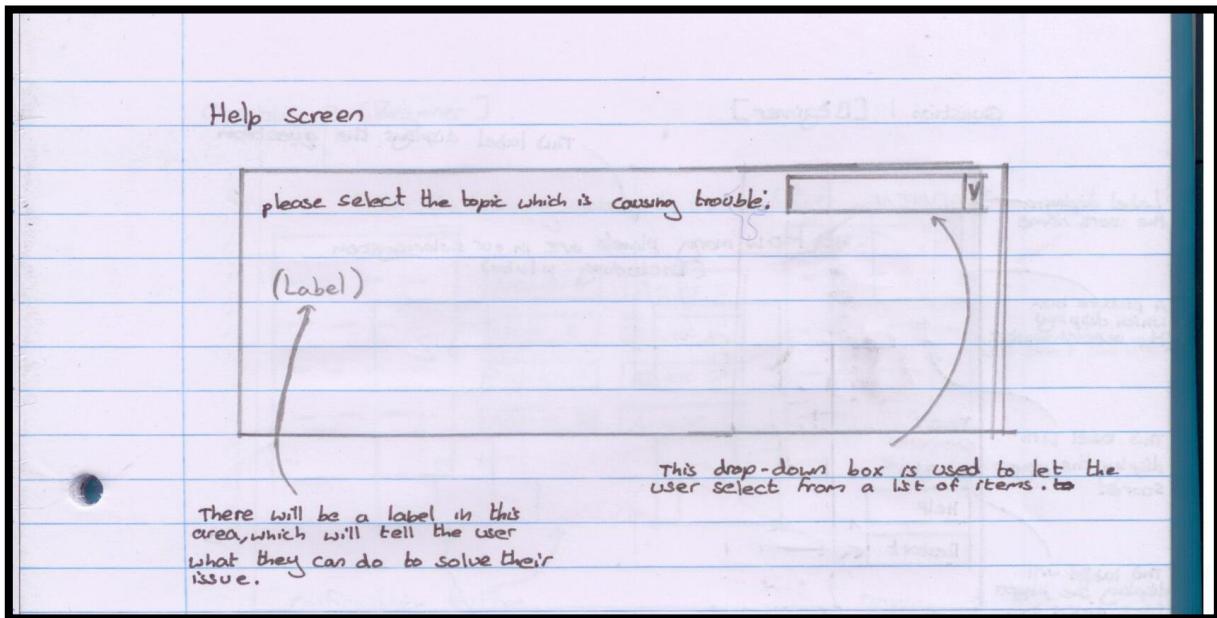


Login Screen

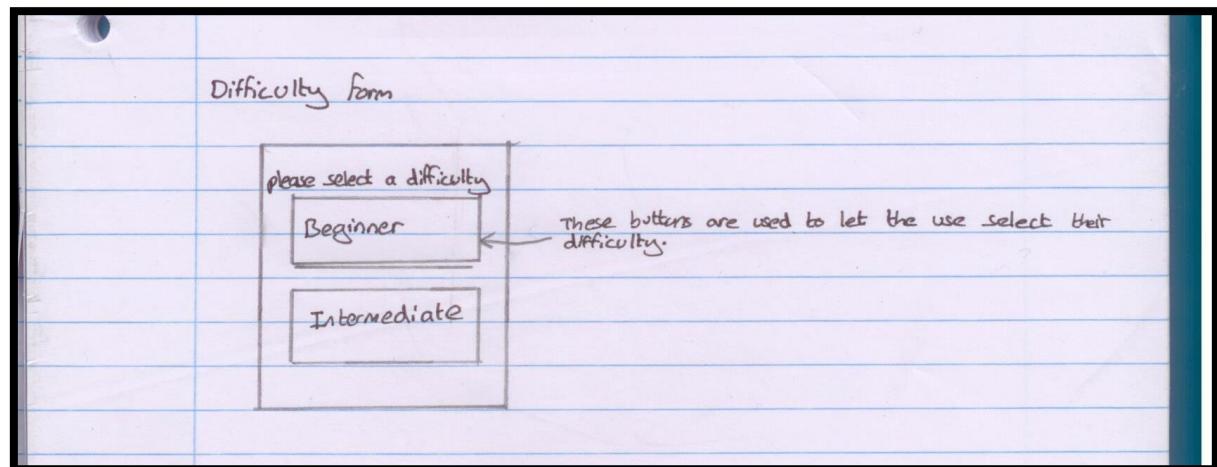


Software systems

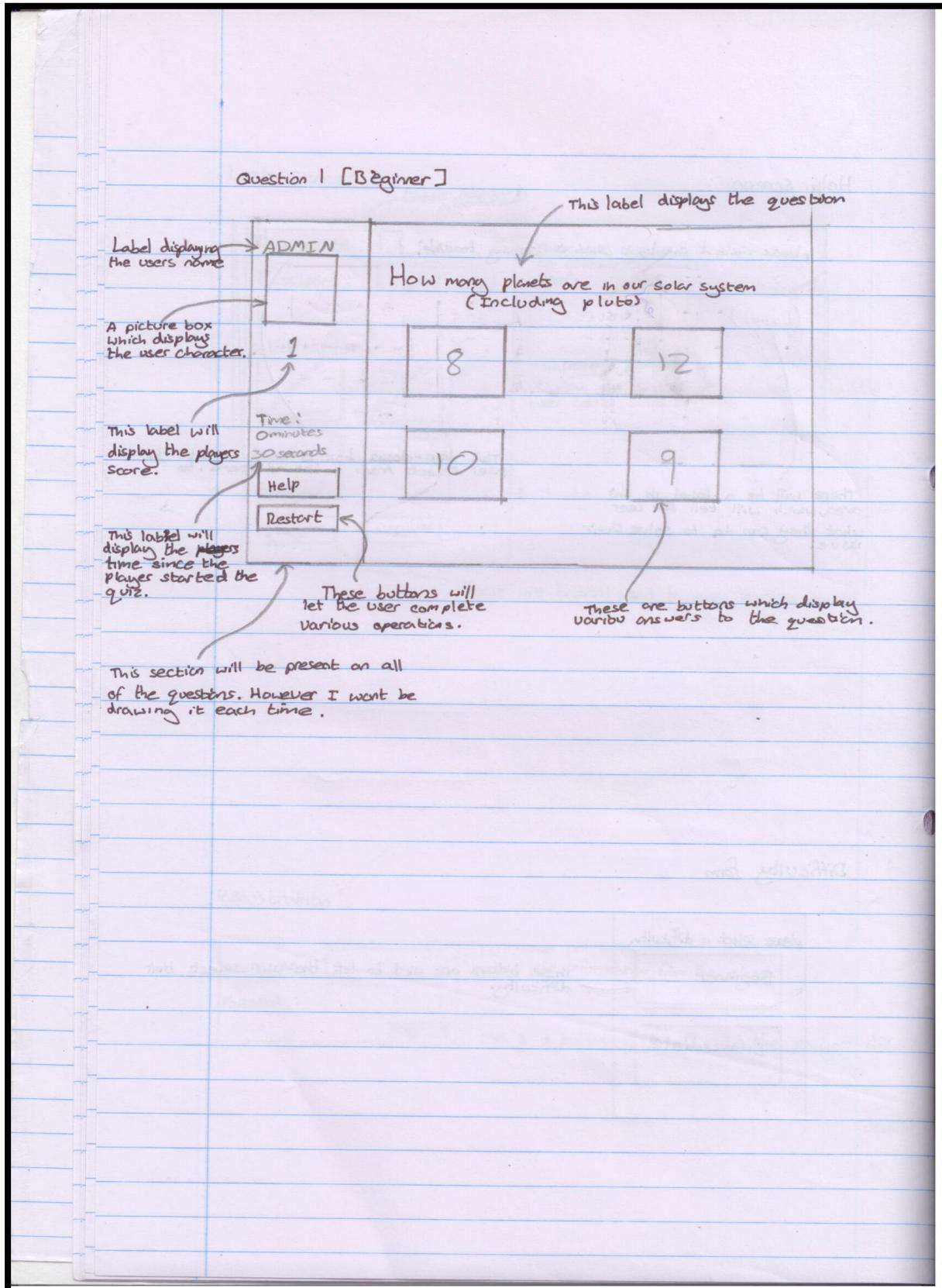
Help Screen



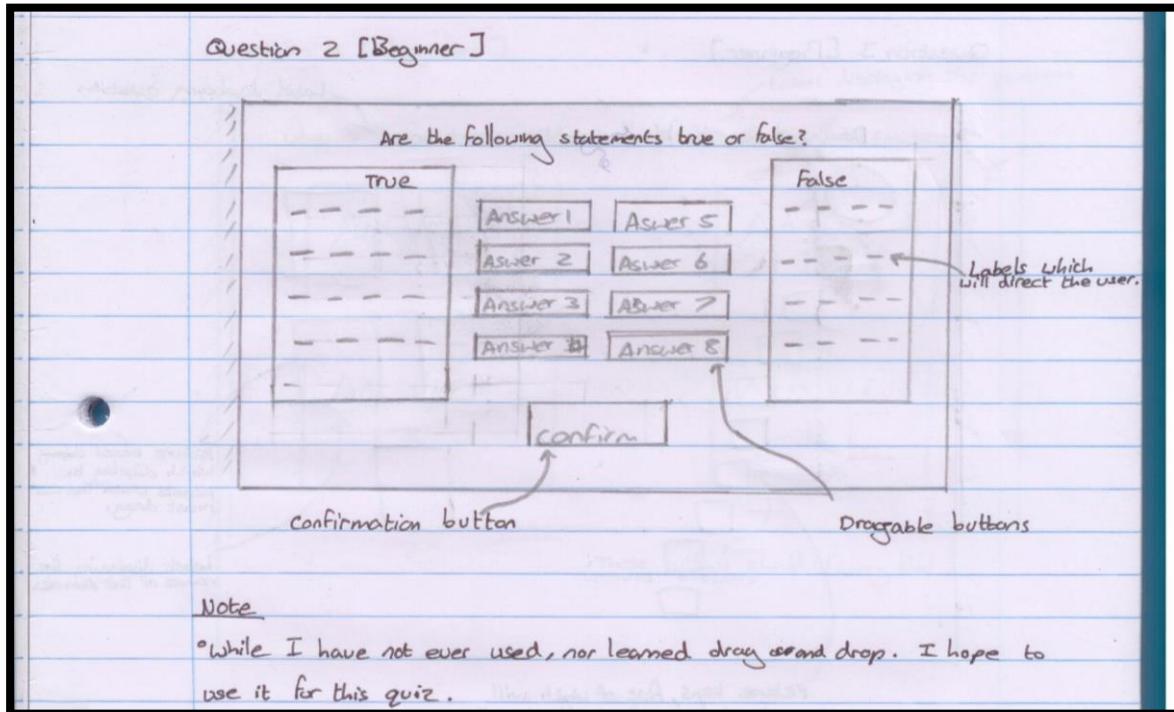
Difficulty Screen



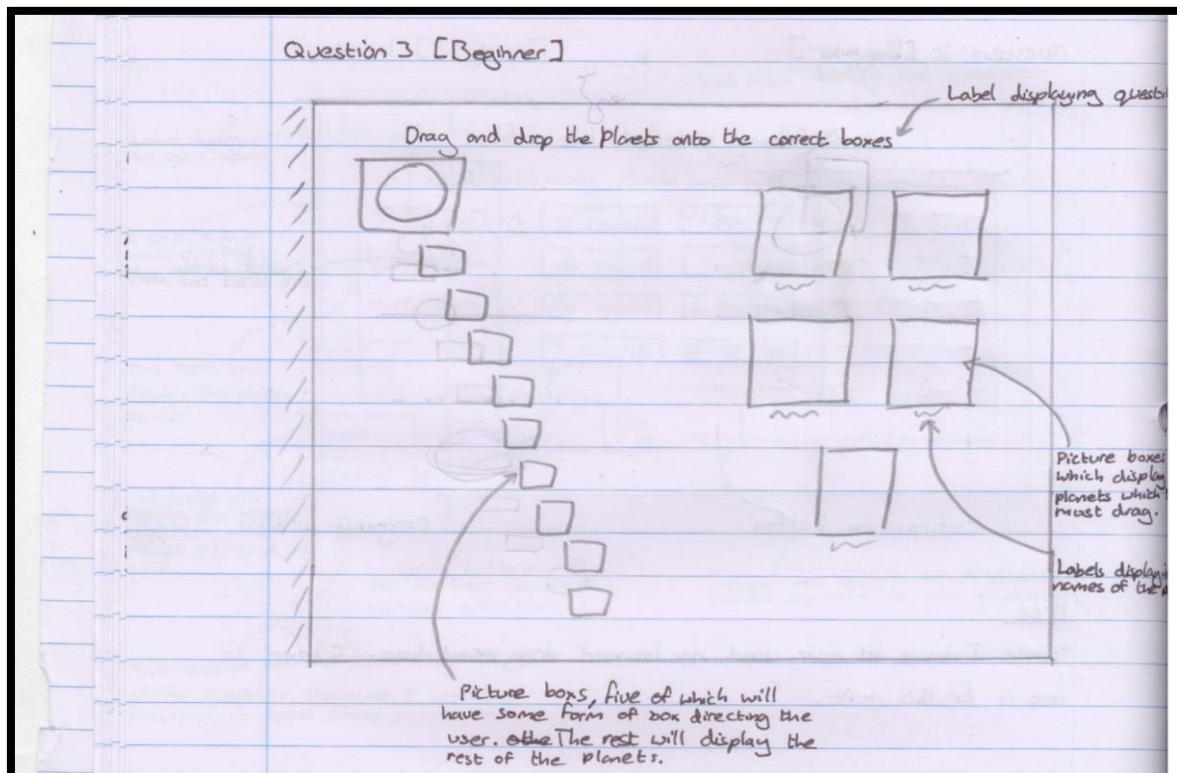
Beginner Question [1]



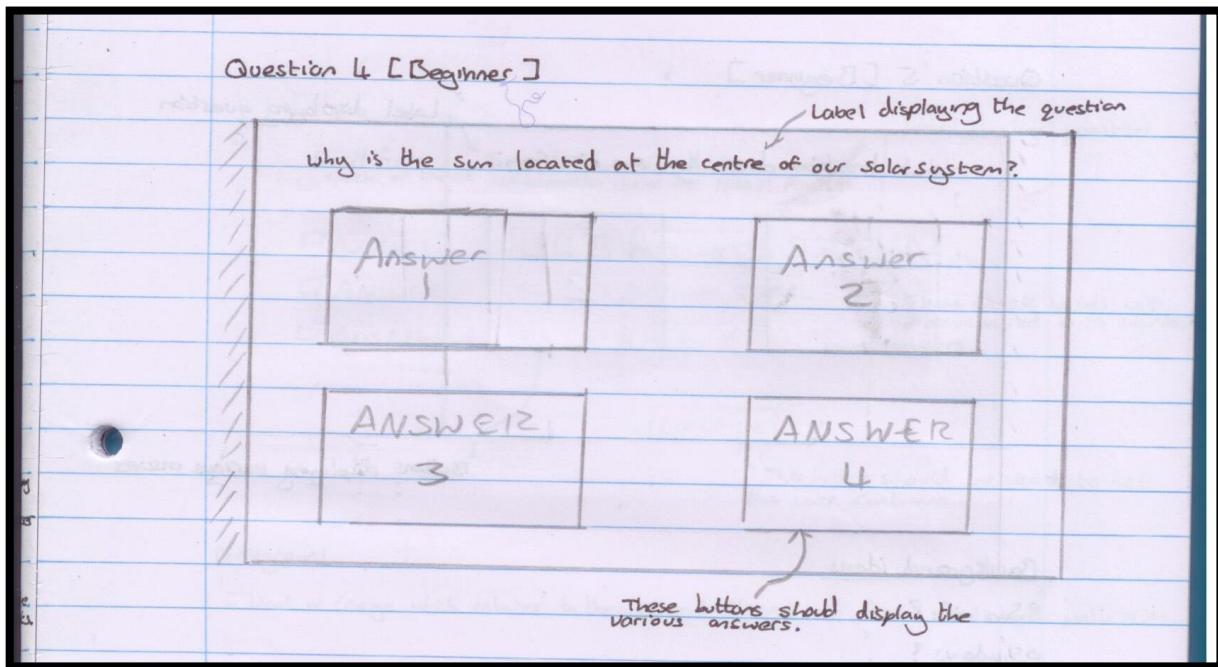
Beginner Question [2]



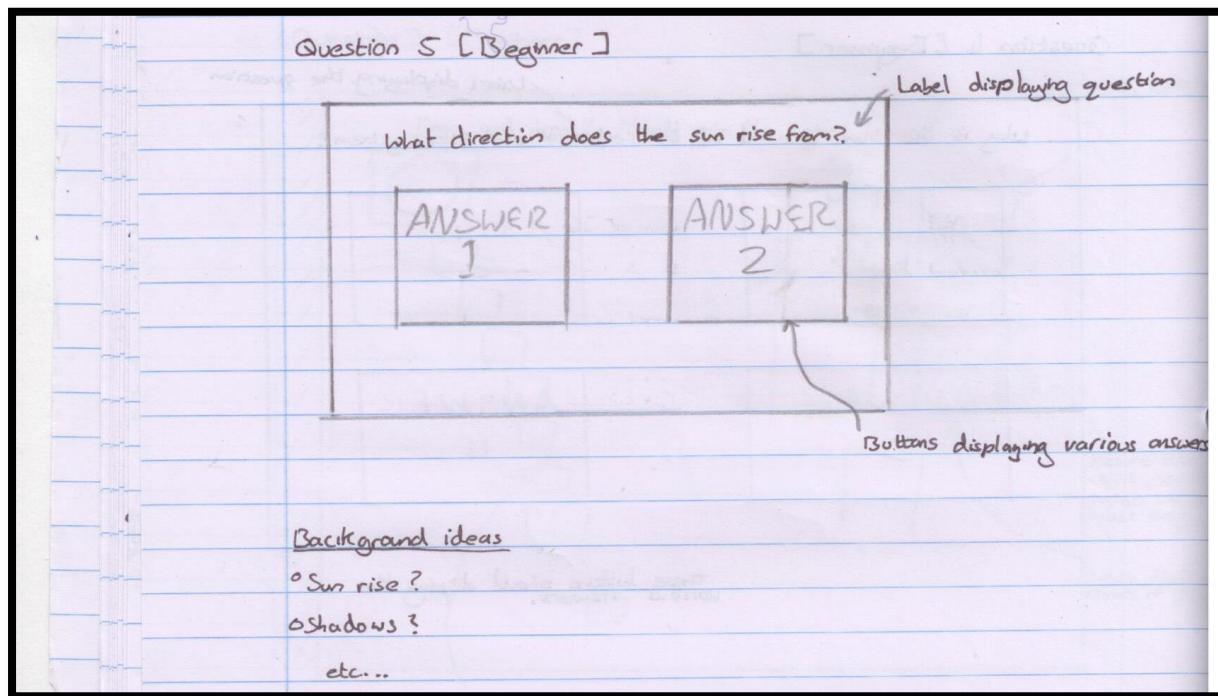
Beginner Question [3]



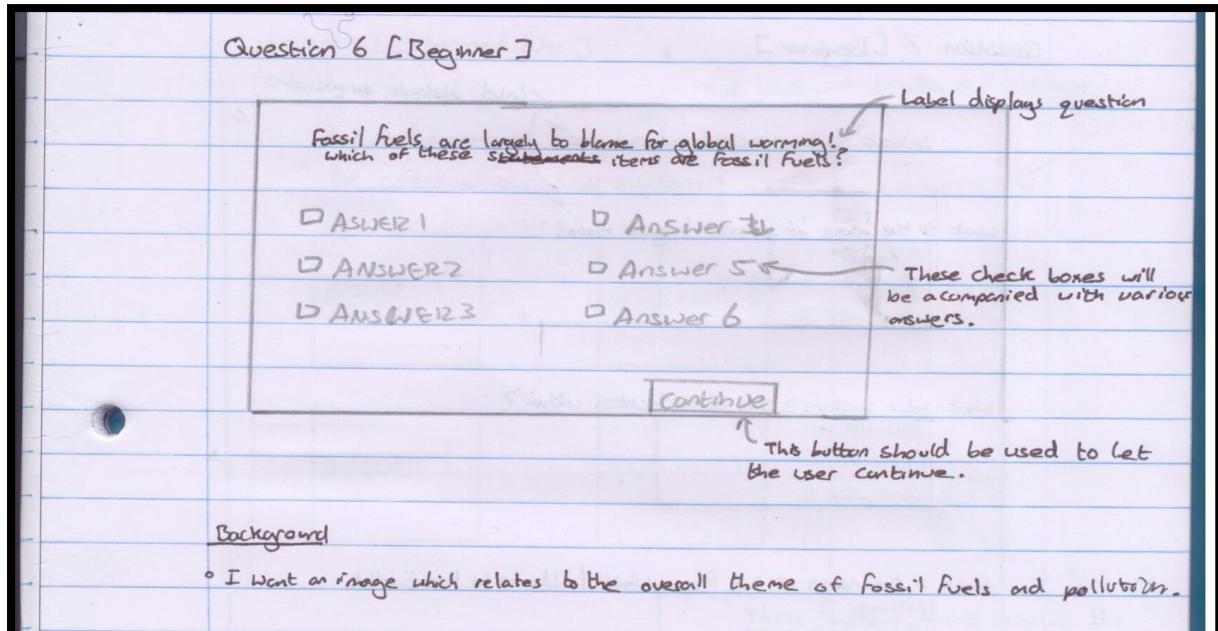
Beginner Question [4]



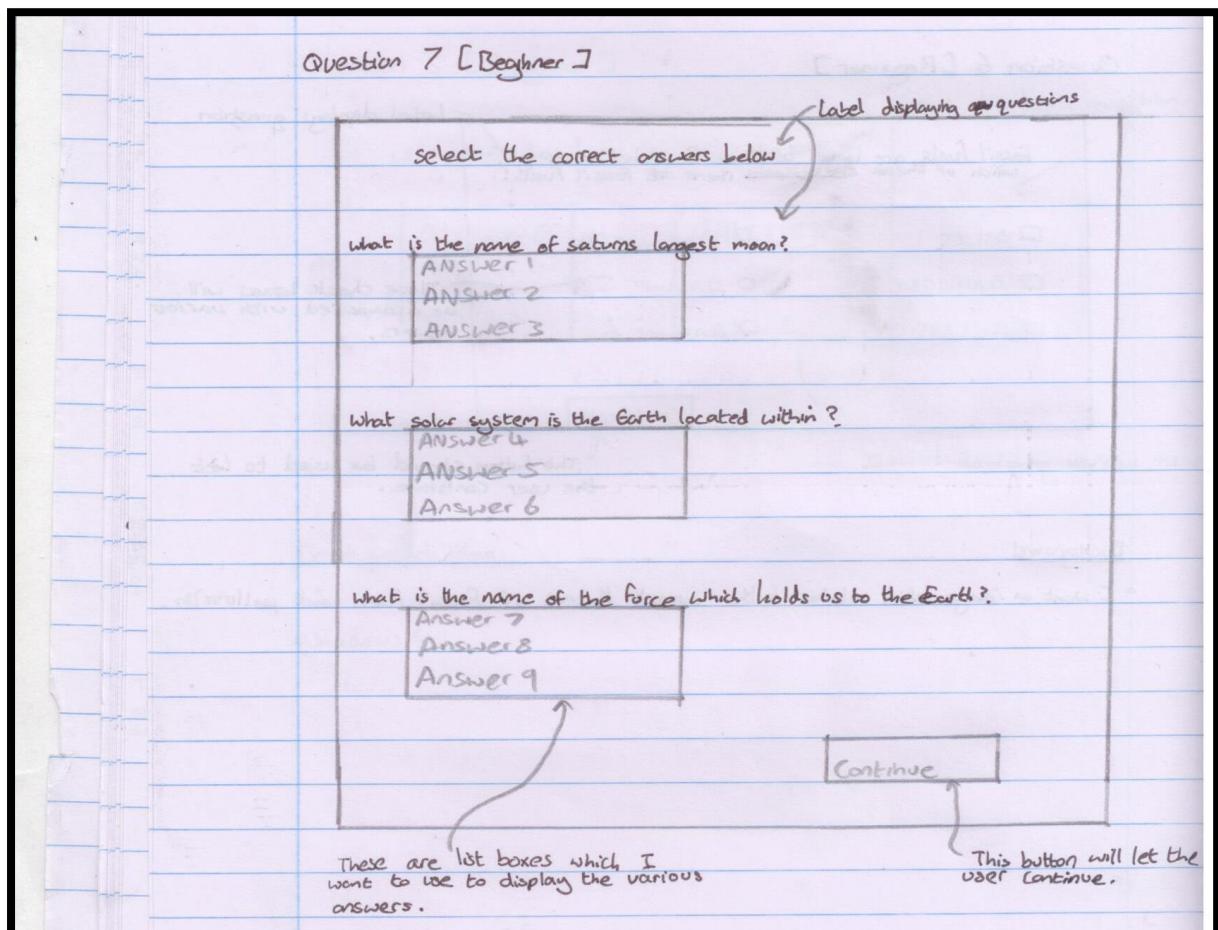
Beginner Question [5]



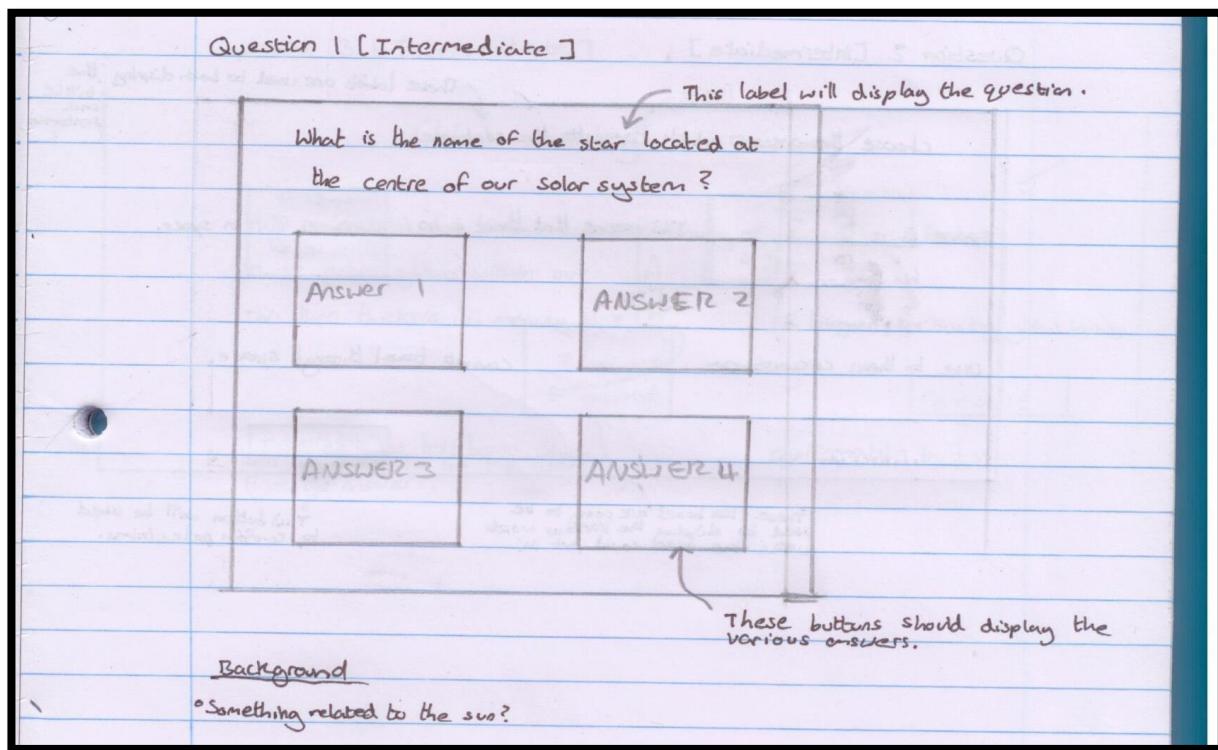
Beginner Question [6]



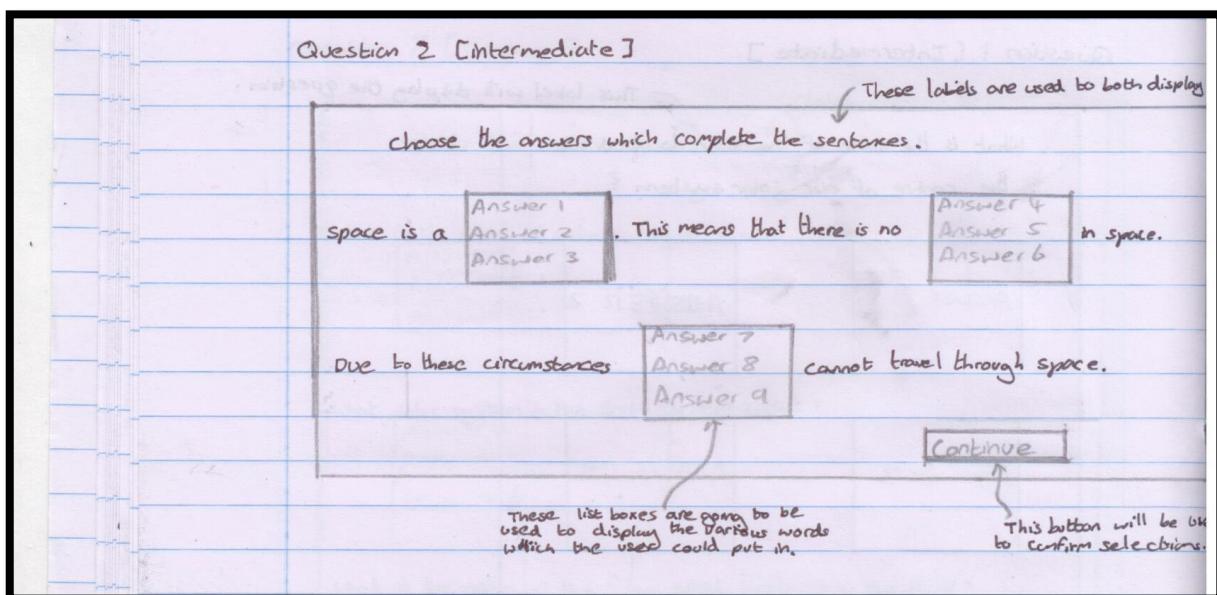
Beginner Question [7]



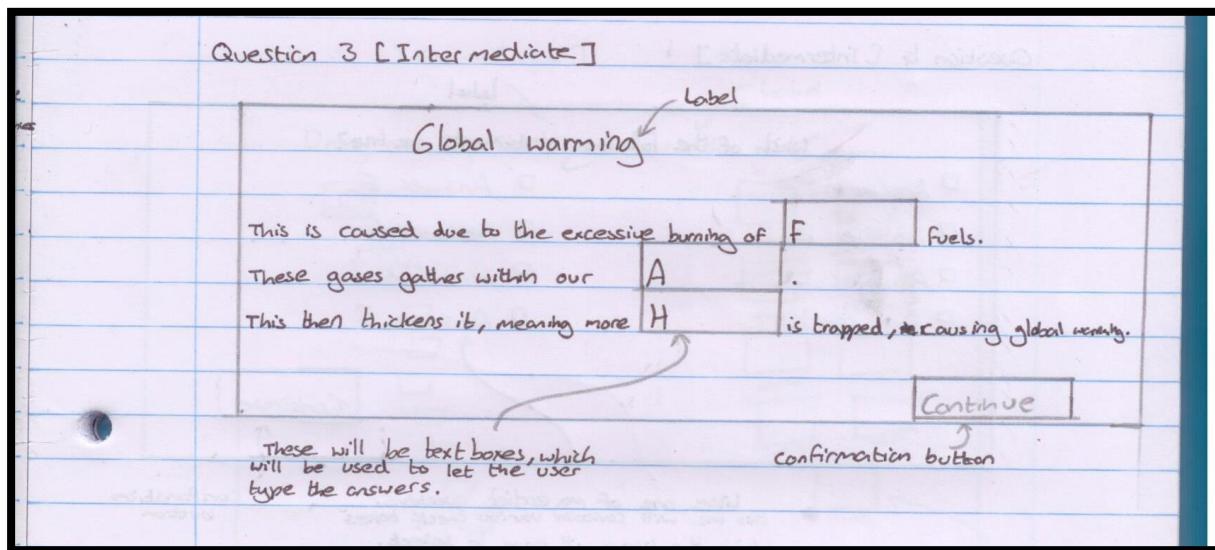
Intermediate Question [1]



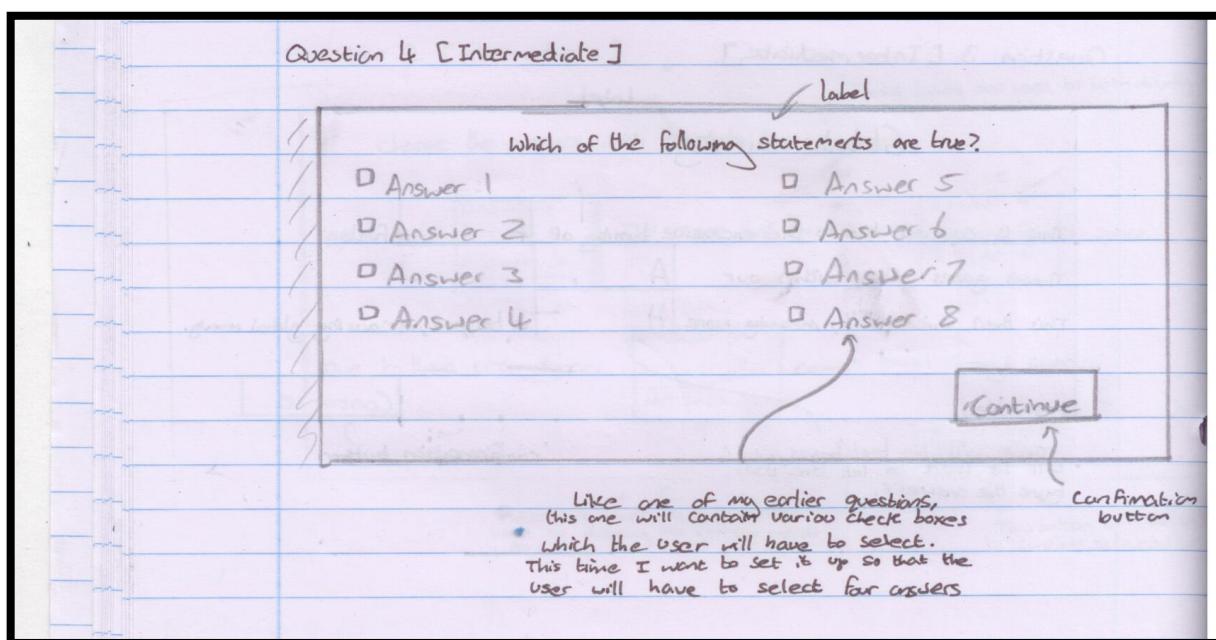
Intermediate Question [2]



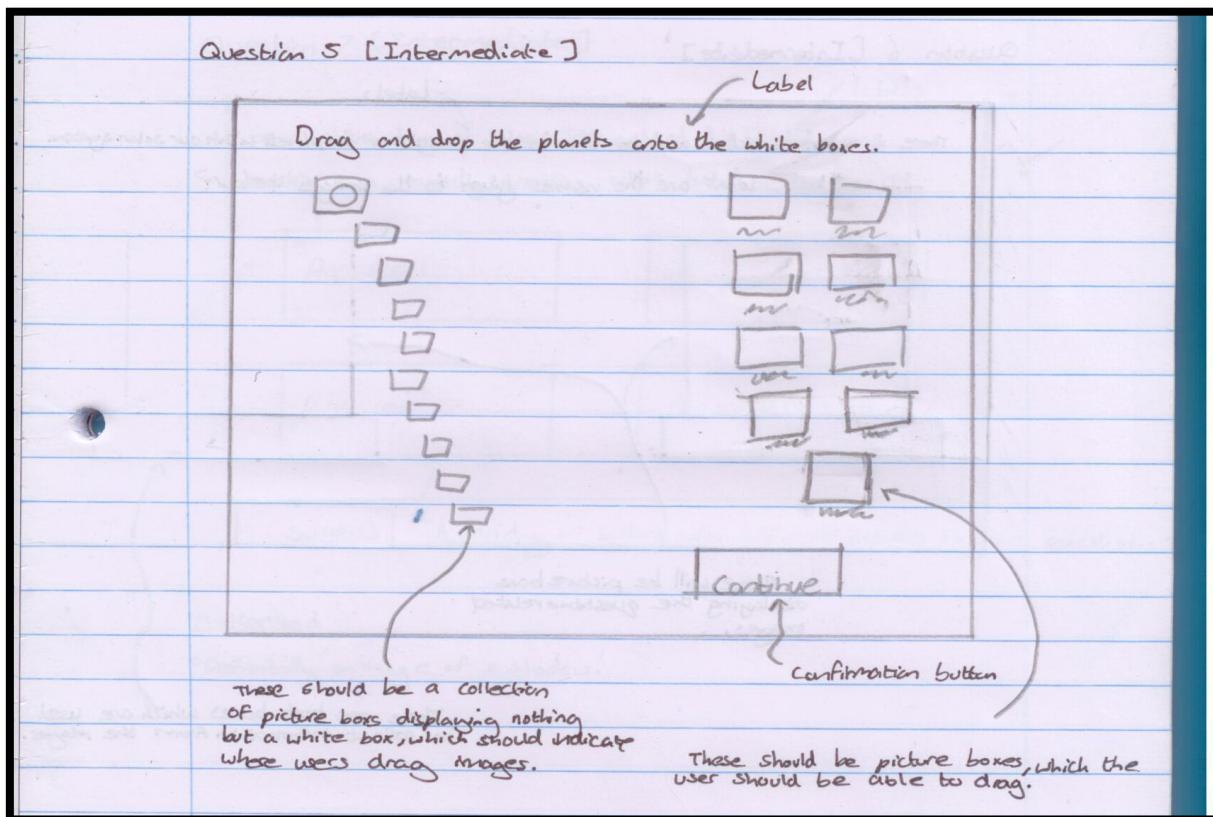
Intermediate Question [3]



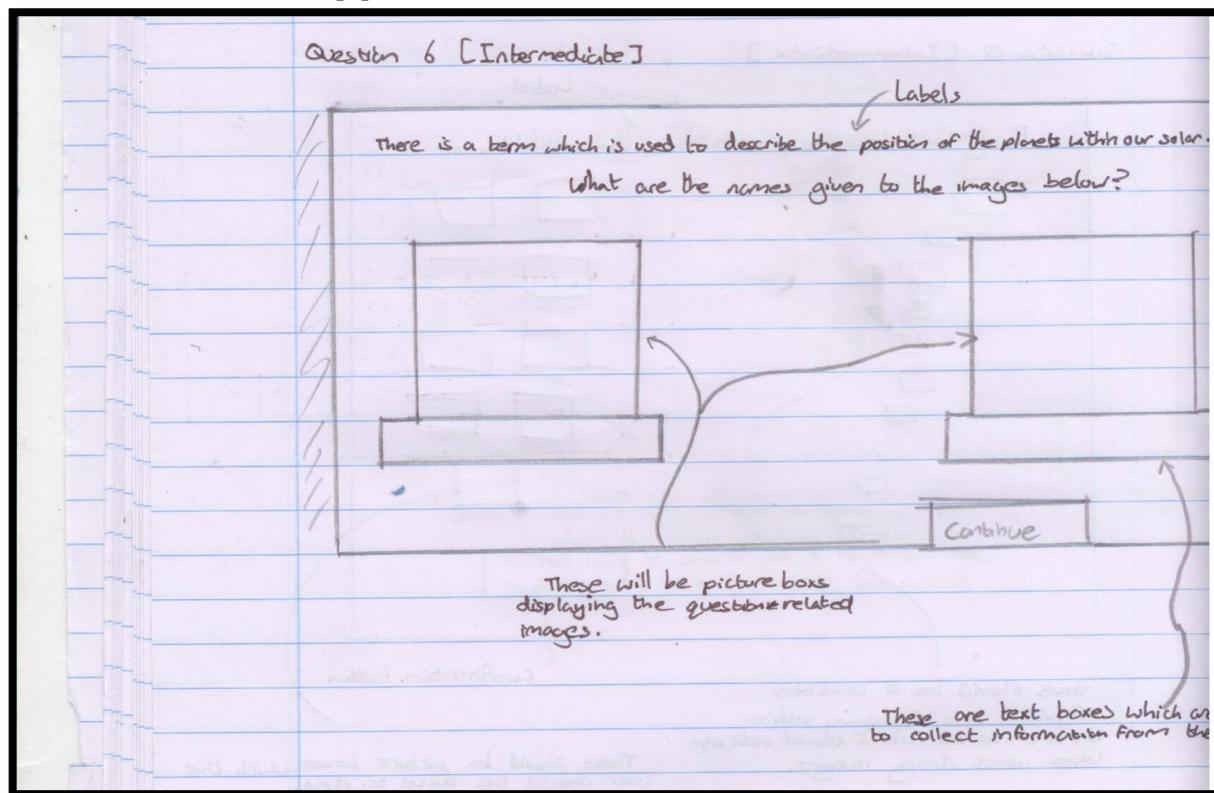
Intermediate Question [4]



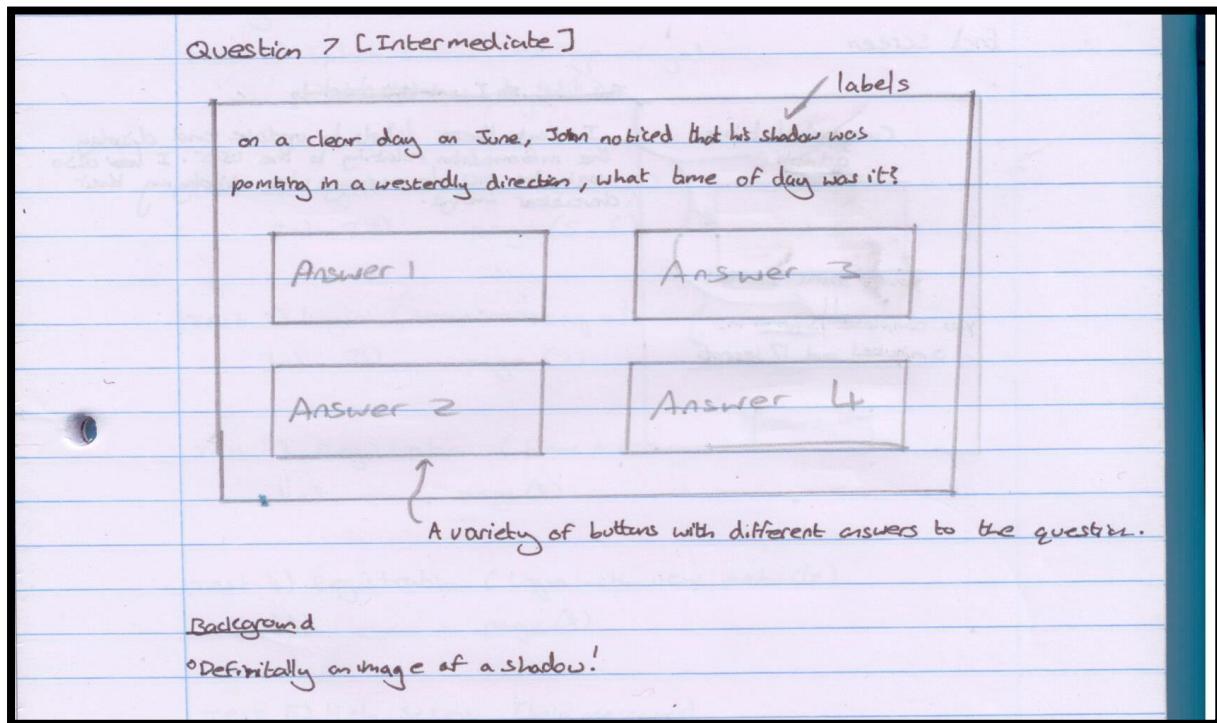
Intermediate Question [5]



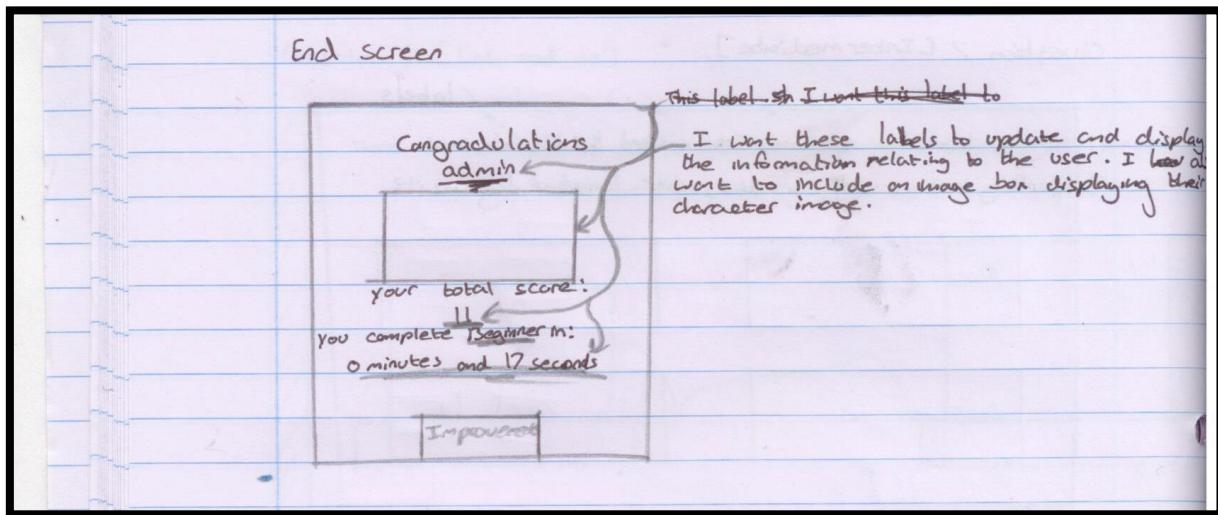
Intermediate Question [6]



Intermediate Question [7]

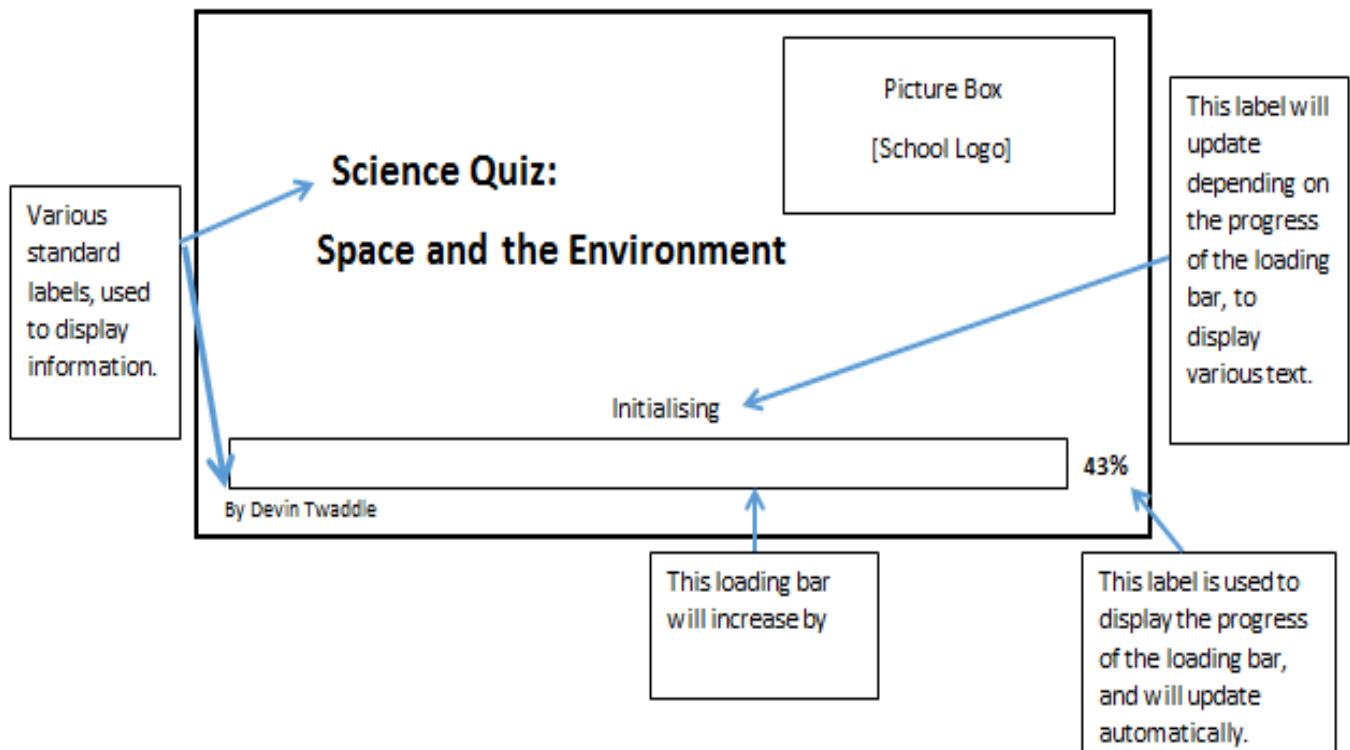


End screen



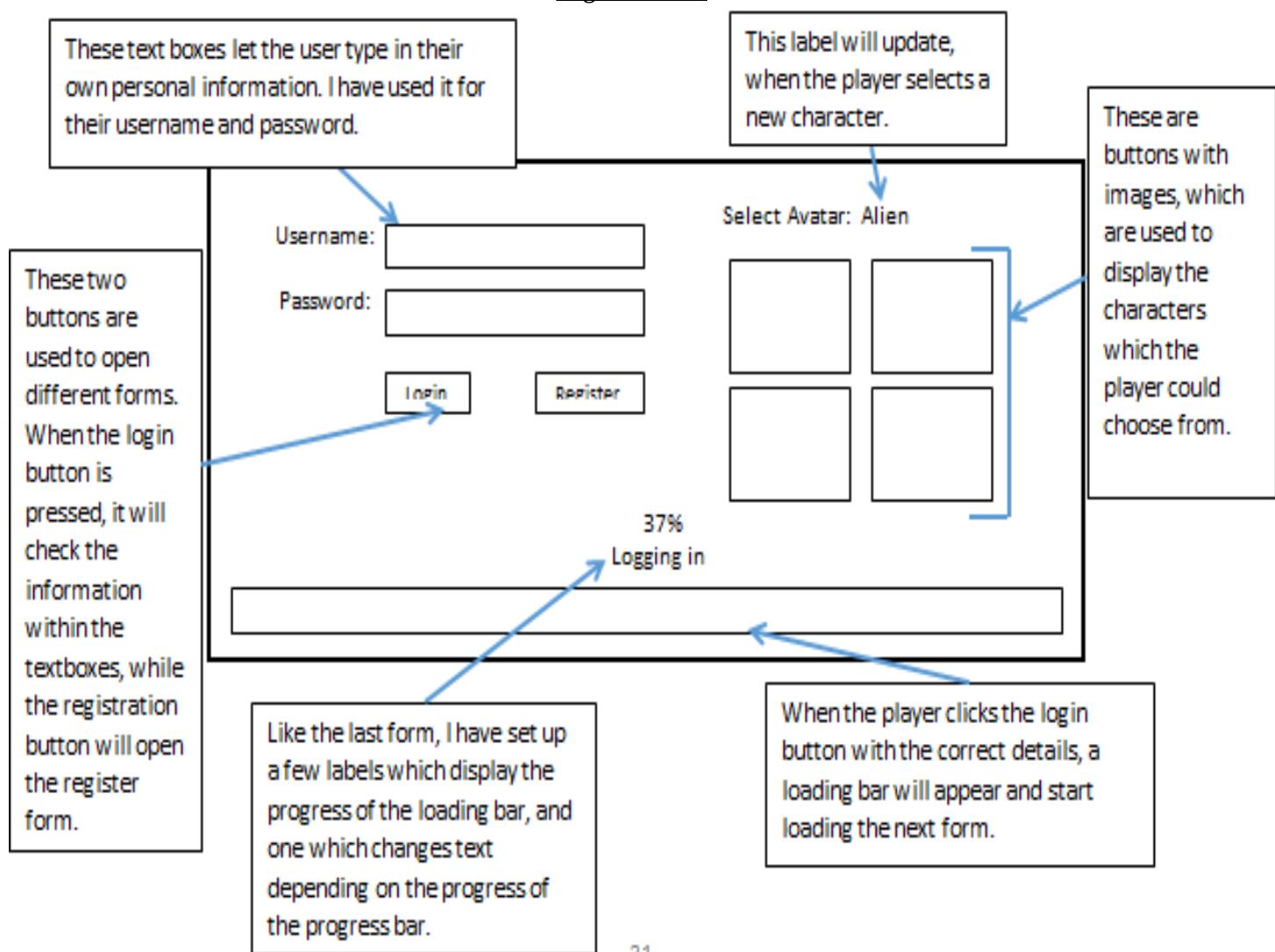
Final game designs

Splash Screen



As the value of the loading bar increases over time, the text displayed above will change to display a different message. This happens a few times at milestones such as 30%. It is also important to note that once the loading bar reaches 100%, it will automatically run a block of code which will hide the splash screen yet open the login screen.

Login Screen



31

There are a variety of different buttons and items within this form; however the important operations are present within the buttons;

btnLogin – This button is used to compare the username and password entered by the user, to that of the previous profile. If matching, and an image is selected it would show and start a loading bar.

btnRegister – When clicked, this button will open the registration form.

Avatar buttons – When the user selects one of these buttons it will assign a number to a global variable, and will also adjust the label present above them.

Loading bar – Once this loading bar reaches 100%, it will hide this form and will open the difficulty form.

Registration

This is a label which is used as an error message within this form. This will appear if at least one of the textboxes are left blank, and will make the register button inactive.

Username:

Password:

Please ensure that there is text within both boxes

Register

For this form I have included another 2 textboxes which are used to let the user type in their new login information.

I have included a button which users can click once they have filled in both boxes, confirming their login details.

The important feature which is present within this form relates to btnRegister. This is because; when the user clicks this button the system has orders to check a specific location within the user's files, and will create a new document if not present. Once this is done it will save the users login information into a textile. This is then used within the login screen. After this has been done the form will automatically hide itself.

Help Form

Please select the topic which you are having a problem with:

If you do not have a login available, please register your details within the quiz
Users may have to register each time the quiz is loaded up.
If users are still having issues, please contact the system administrator

This is a drop-down box, which lets the user select from a list of various problems.

Depending on the problem selected, this label will display varying information to help the user.

Difficulty

Please select a difficulty:

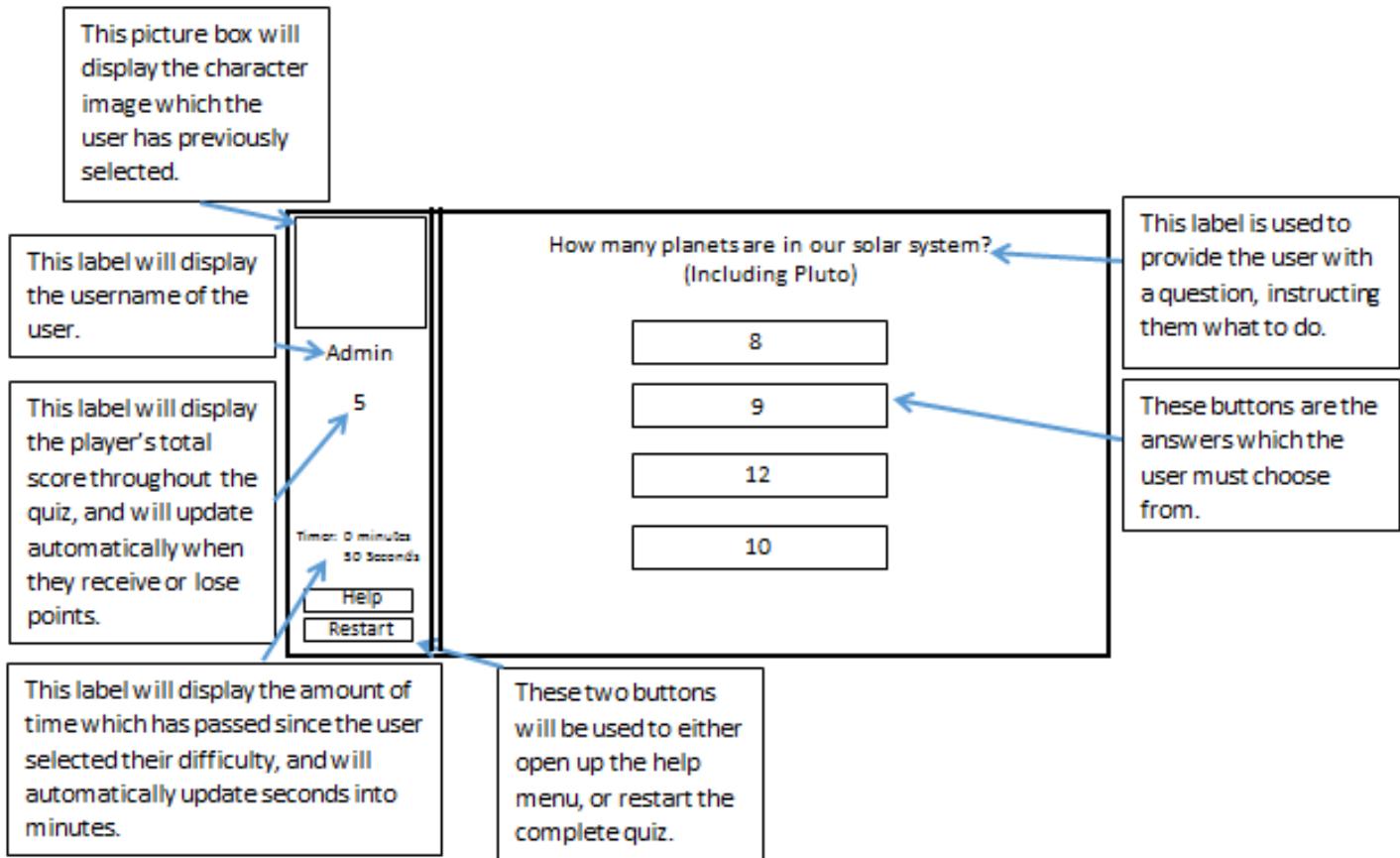
Beginner

Intermediate

This is a simple form, with the main feature being the two buttons.
When the user clicks a button, the system will load a question relating to the difficulty selected.

When the user clicks one of these two options, there is a block of code which will activate. This code will generate a random numerical digit within the range of 1 and 7. This number would then be used to select one of the seven forms present within each category. Once it has selected one it will load it, and hide this one.

Beginner Question [1]



Within this question the important operations are;

Answer Buttons – Whenever the user selects one of the answer buttons, they will either gain or lose a point. It will also run a similar block of code present within the difficulty screen, generating a random number and then selecting a new form. It would then open that and hide this one.

btnHelp – If the user selects this button it will open the help form.

btnRestart – Clicking this button will reset all of the variables present within the quiz, and will take the user back to the difficulty menu.

It is also worth noting that this form is assigned to a bool variable within an array. This is important because it stops the user from seeing the same question without restarting. It is also worth noting that all of these forms will display a user time. This is a variable which increase per second within each form.

Beginner Question [2]

Are the following statements true or false?
Drag the correct statements onto the lines within the boxes

True	False
----- ----- ----- ----- -----	----- ----- ----- ----- -----

Please drag all answers

Confirm Reset question

This is an error message which will appear if the user has not dragged all of the answers, and will cause the confirm button to be inactive.

These buttons are used to either lock in the user's answers, if they have dragged all of the answers. While the other button can be used to reset the dragged answers, making the buttons reappear and clears the drag areas.

These labels have been modified to receive any information dragged onto it in the form of text. This means that it will display any answer which the user drags.

These are buttons, which when the user clicks and drags them, will move information.

Within this question the important operations are;

Drag and Drop – The buttons present between the true and false columns are the answer buttons. The user has the ability to drag the information present within these to a new area which I have designated (Hence the dotted lines). Once the user drags one of these buttons into one of the designated areas, the information will be posted, and the button will disappear.

btnConfirm – Once all of the buttons have been dragged, the confirm button will become active letting the user click it. Once they do the same code from the last question will run loading a new form.

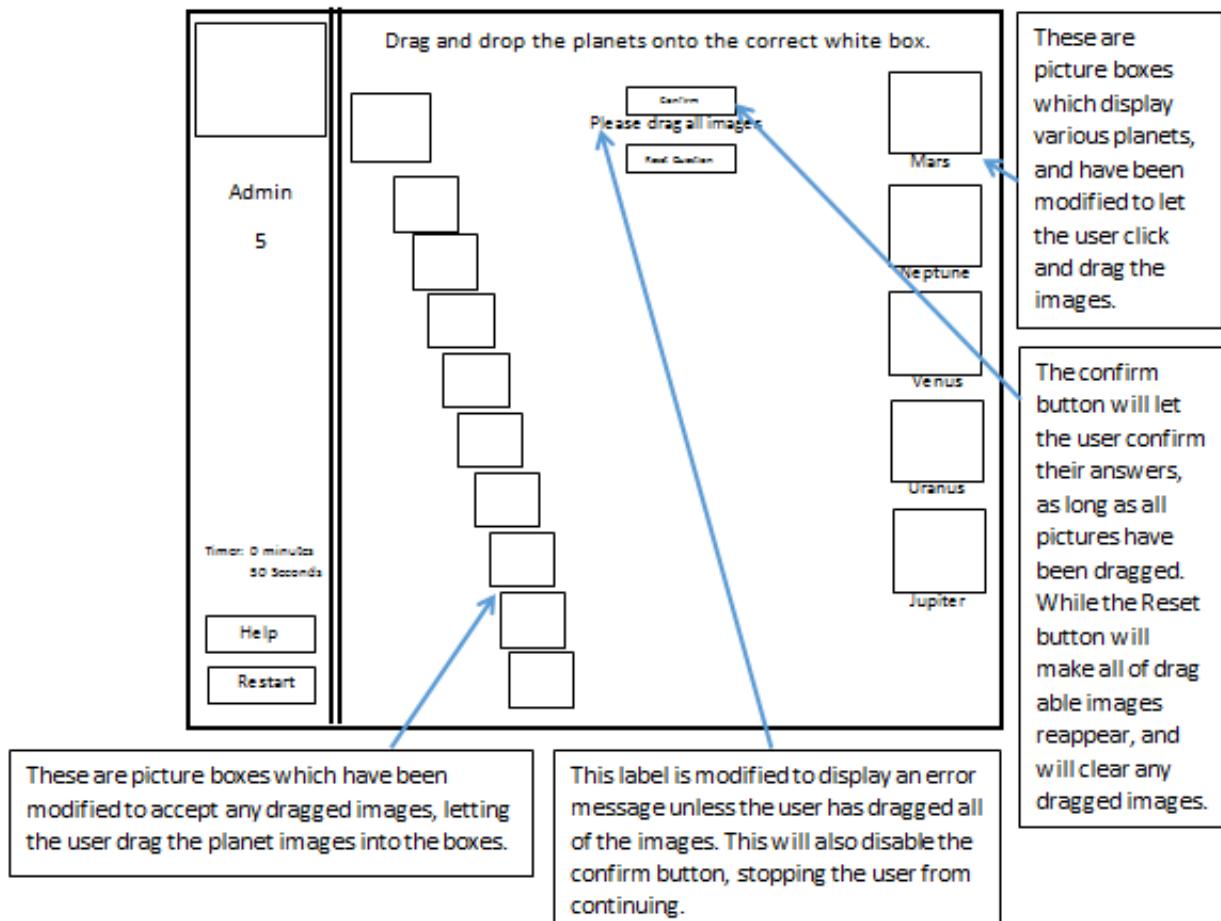
btnQuestionRestart – When pressed, this button will reset the question, in the sense that all of the dragged buttons will reappear, and the dragged text will be reset to the dotted lines. It will also reset any variables which could be changed.

btnHelp – If the user selects this button it will open the help form.

btnRestart – Clicking this button will reset all of the variables present within the quiz, and will take the user back to the difficulty menu.

It is also worth noting that this form is assigned to a bool variable within an array. This is important because it stops the user from seeing the same question without restarting. It is also worth noting that all of these forms will display a user time. This is a variable which increase per second within each form.

Beginner Question [3]



Within this question the important operations are;

Drag and Drop – The images present at the left hand side of the screen will display drag-able planets, while the ones in the centre will accept drags. This means that the user can select and drag a planet and place it in the centre of the screen. It is also worth mentioning that the picture boxes will adjust their size, to make the image fit appropriately, and that the planets on the right will disappear if they have been dragged into the centre.

btnConfirm – Once the user has dragged all of the planets, the confirm button will become active. If the user clicks this they will gain or lose score depending on their answer, and a new form will be loaded.

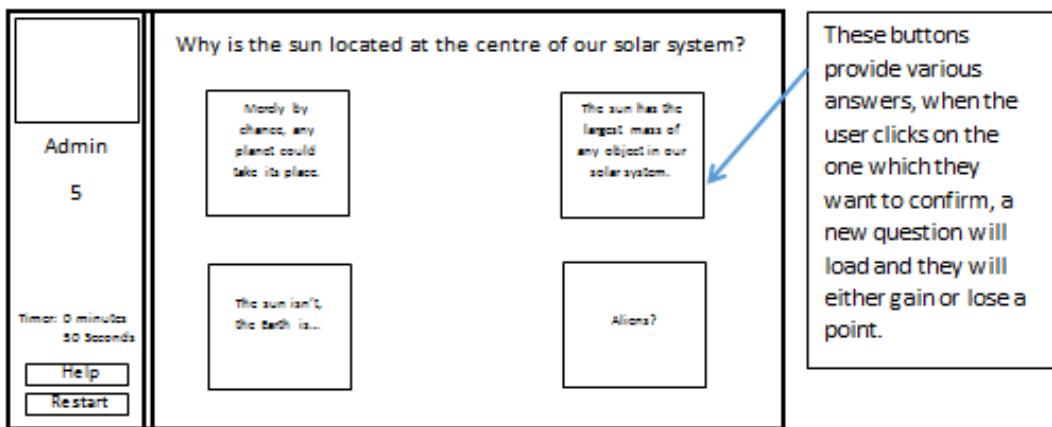
btnQuestionRestart – When this button is pressed, any dragged planets will reappear along with their name labels, and picture boxes which accept the drag would change back to the white square placeholder. It is also important to note that all variables would also be reset.

btnHelp – If the user selects this button it will open the help form.

btnRestart – Clicking this button will reset all of the variables present within the quiz, and will take the user back to the difficulty menu.

It is also worth noting that this form is assigned to a bool variable within an array. This is important because it stops the user from seeing the same question without restarting. It is also worth noting that all of these forms will display a user time. This is a variable which increase per second within each form.

Beginner Question [4]



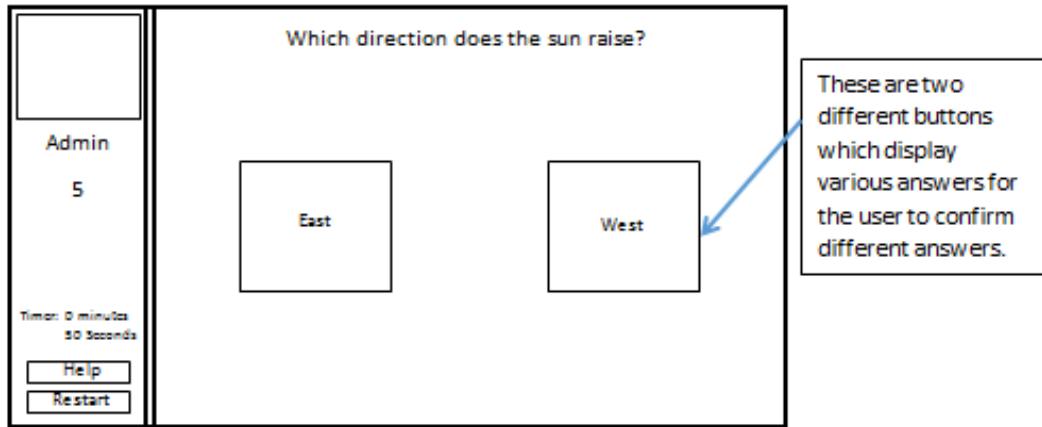
BtnAnswers – Selecting one of these answers will either reward the user with a point, or subtract one off of them. It will also run the block of code, loading a new form.

btnHelp – If the user selects this button it will open the help form.

btnRestart – Clicking this button will reset all of the variables present within the quiz, and will take the user back to the difficulty menu.

It is also worth noting that this form is assigned to a bool variable within an array. This is important because it stops the user from seeing the same question without restarting. It is also worth noting that all of these forms will display a user time. This is a variable which increase per second within each form.

Beginner Question [5]



BtnAnswers – Selecting one of these answers will either reward the user with a point, or subtract one off of them. It will also run the block of code, loading a new form.

btnHelp – If the user selects this button it will open the help form.

btnRestart – Clicking this button will reset all of the variables present within the quiz, and will take the user back to the difficulty menu.

It is also worth noting that this form is assigned to a bool variable within an array. This is important because it stops the user from seeing the same question without restarting. It is also worth noting that all of these forms will display a user time. This is a variable which increase per second within each form.

Beginner Question [6]

Fossil fuels are largely to blame for global warming which of the below can be classified as fossil fuels

Uranium Natural gases
 Coal Charcoal
 Bio-fuel Oil

Please select 3 answers

Continue

For this question, these components are check boxes, which the user must click on to change their check state, which can either be selected or not selected.

This label is an error message, which will be visible unless the user has selected a total of three answers. This will also make the continue button active.

This button will let the user confirm their selection of answers

Checkboxes – For this question the user is required to select three of the following statements. The coding for this is interesting because the button will only become active once this requirement has been made. All of these check boxes are connected to a int variable, if a box is selected the number will increase and will decrease when deselected.

btnContinue – Once the user selects this button it will check their answers and provide the according points, before loading a new form.

btnHelp – If the user selects this button it will open the help form.

btnRestart – Clicking this button will reset all of the variables present within the quiz, and will take the user back to the difficulty menu.

It is also worth noting that this form is assigned to a bool variable within an array. This is important because it stops the user from seeing the same question without restarting. It is also worth noting that all of these forms will display a user time. This is a variable which increase per second within each form.

Beginner Question [7]

Select the correct answers below

What is the name of Saturn's largest moon?

Titan
Olympus
Neptune

What solar system is the Earth located within?

The Solar system
The Helios
The Milky Way

What is the name of the force which holds us to the Earth?

The Solar system
The Helios
The Milky Way

Admin
5
Timer: 0 minutes 50 Seconds
Help
Restart

Continue

These are list boxes which display various answers which the user can select from. This is done by clicking on the answer the user wants to select.

This is a confirmation button, and when clicked will check the answers which the user has selected, either giving or taking points from them.

GroupBoxes – This question displays three different group boxes, each containing three answers for the question above them. The user can select between the three by clicking on them. Behind the scenes the quiz will compare the users answer to that of the correct one.

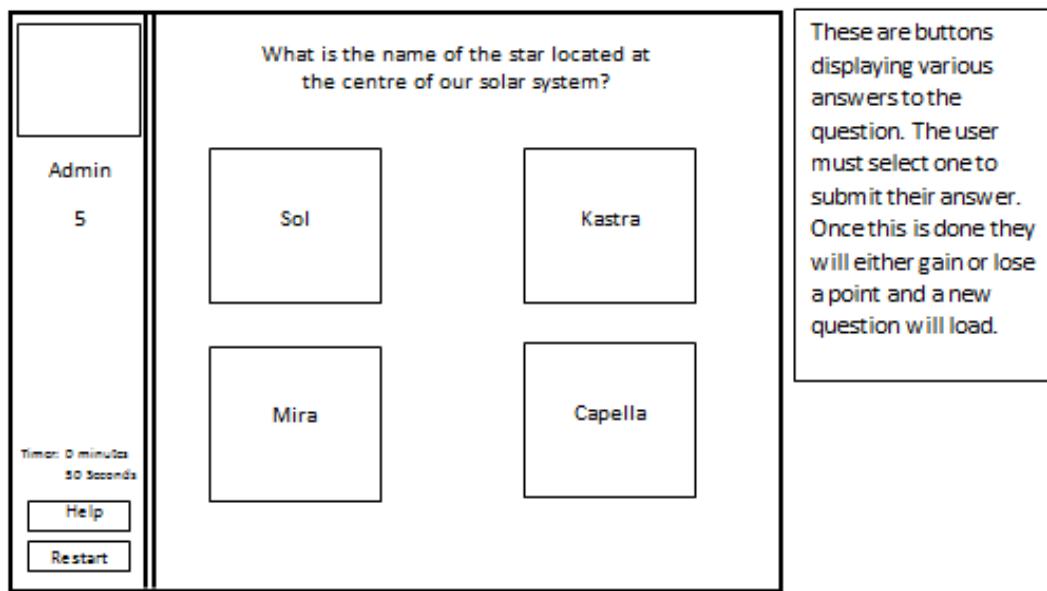
btnContinue – Once the user selects this button it will check their answers and provide the according points, before loading a new form.

btnHelp – If the user selects this button it will open the help form.

btnRestart – Clicking this button will reset all of the variables present within the quiz, and will take the user back to the difficulty menu.

It is also worth noting that this form is assigned to a bool variable within an array. This is important because it stops the user from seeing the same question without restarting. It is also worth noting that all of these forms will display a user time. This is a variable which increase per second within each form.

Intermediate Question [1]



btnAnswers – This question displays 4 buttons with each displaying an answer to the question above. Once the user clicks on one of these buttons a new form should load. It will also give points accordingly.

btnContinue – Once the user selects this button it will check their answers and provide the according points, before loading a new form.

btnHelp – If the user selects this button it will open the help form.

btnRestart – Clicking this button will reset all of the variables present within the quiz, and will take the user back to the difficulty menu.

It is also worth noting that this form is assigned to a bool variable within an array. This is important because it stops the user from seeing the same question without restarting. It is also worth noting that all of these forms will display a user time. This is a variable which increases per second within each form.

Intermediate Question [2]

Choose the answers which complete the sentences.

Space is a Sink
Vacuum
Mop

This means that there is no Nitrogen
Water molecules
Oxygen

Due to these circumstances Sound
Heat
Light

Cannot travel though space

Timer: 0 minutes 50 Seconds

Help

Restart

Continue

For this question the user has been presented with a sentence with three group boxes within it. Each of which have a list box letting the user know that they must select the word which matches the sentence the best. When the user clicks on a word it will become highlighted, unselecting any other words within the same box.

This button is a confirmation button and will submit the user's answers.

GroupBoxes – This question is structured as a sentence with three group boxes within it. The user should select the words which they believe to complete the sentence the best. Once this has been done they can click on the continue button.

btnContinue – Once the user selects this button it will check their answers and provide the according points, before loading a new form.

btnHelp – If the user selects this button it will open the help form.

btnRestart – Clicking this button will reset all of the variables present within the quiz, and will take the user back to the difficulty menu.

It is also worth noting that this form is assigned to a bool variable within an array. This is important because it stops the user from seeing the same question without restarting. It is also worth noting that all of these forms will display a user time. This is a variable which increase per second within each form.

Intermediate Question [3]

Global Warming

This is caused by the excessive burning of [] Fuels

These gases gather within our []

This thickens it, meaning more [] is trapped, increasing the temperature of the world

Admin
5

Timer: 0 minutes 50 Seconds

Help

Restart

Continue

Once again, the user is provided with various sentences missing words. This time the gaps are replaced with text boxes which the user must type their answers within.

This button is a confirmation button and will submit the

GroupBoxes – This question is structured as a sentence with three group boxes within it. The user should select the words which they believe to complete the sentence the best. Once this has been done they can click on the continue button.

btnContinue – Once the user selects this button it will check their answers and provide the according points, before loading a new form.

btnHelp – If the user selects this button it will open the help form.

btnRestart – Clicking this button will reset all of the variables present within the quiz, and will take the user back to the difficulty menu.

It is also worth noting that this form is assigned to a bool variable within an array. This is important because it stops the user from seeing the same question without restarting. It is also worth noting that all of these forms will display a user time. This is a variable which increase per second within each form.

Intermediate Question [4]

Admin
5
Timer: 5 minutes 50 Seconds
Help
Restart

Which of the following statements are true?

Global warming is caused by increased Earth temperatures
 Bio-fuels are more environmental friendly
 Fossil fuels are good for the environment
 Cutting down trees helps the atmosphere
 Global warming causes the ice caps to melt
 Nuclear waste can be used to improve plant growth
 Spraying lots of aerosols slows the progression of global warming
 Nuclear waste harms the environment

Please select 4 statements

Like the beginners question, for this one the user must select a set number of the check boxes. Each one will display a different statement, and the user must click on the ones which are true. Clicking an answer will cause a tick to become visible within the check box.

This label is used will display an error message, unless exactly four answers have been chosen.

This button is a confirmation button and will submit the user's answers.

Check Boxes – For this question there are 8 different statements each accompanied by a checkbox. To answer this question, the user must check four of the statements which best answer the question. In regards to the coding, to ensure that only four can be selected at one time, all of the checkboxes are connected to an int variable. Each time a statement is checked the number will increase. This simply means that it must = 4 to make the continue button active.

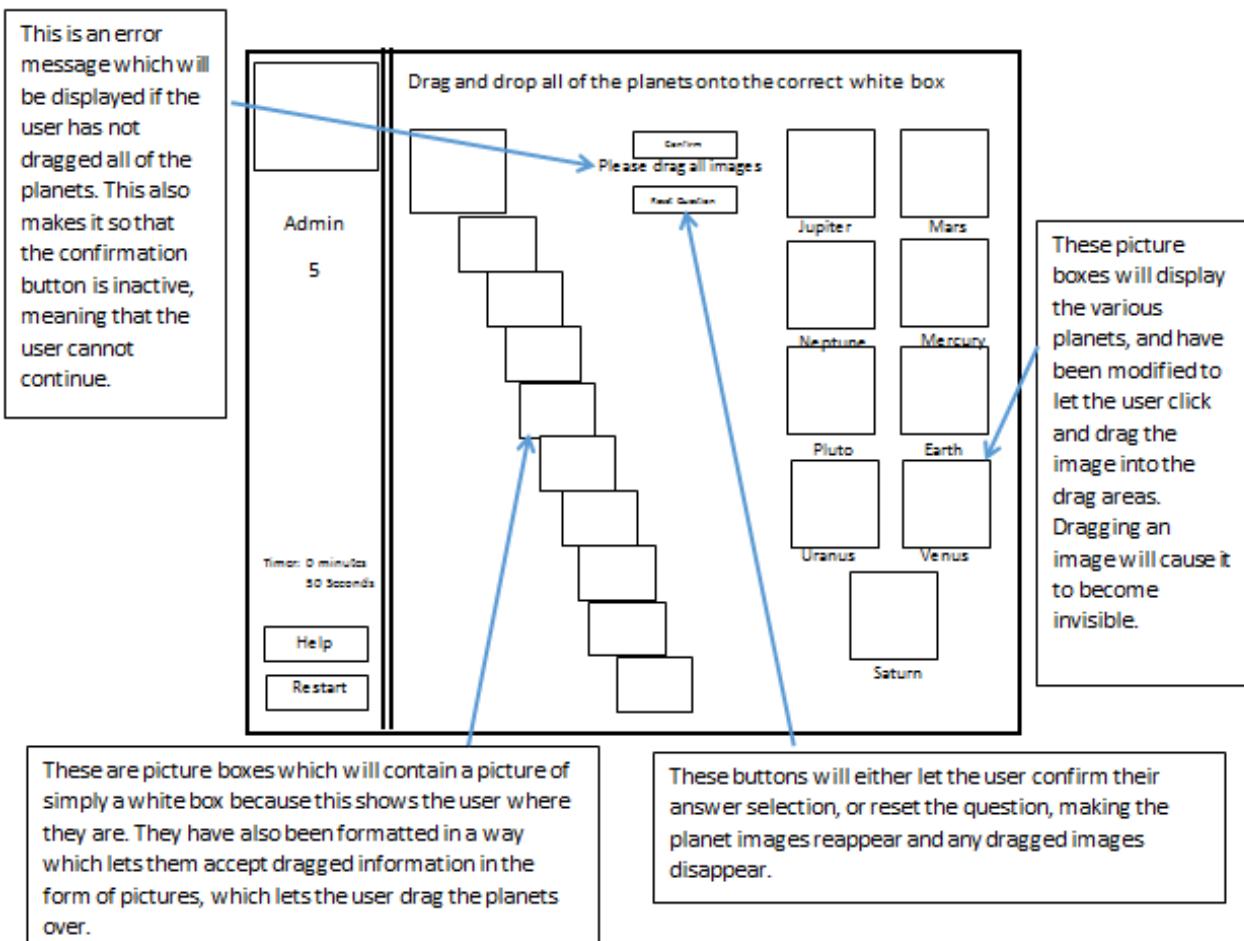
btnContinue – Once the user selects this button it will check their answers and provide the according points, before loading a new form.

btnHelp – If the user selects this button it will open the help form.

btnRestart – Clicking this button will reset all of the variables present within the quiz, and will take the user back to the difficulty menu.

It is also worth noting that this form is assigned to a bool variable within an array. This is important because it stops the user from seeing the same question without restarting. It is also worth noting that all of these forms will display a user time. This is a variable which increase per second within each form.

Intermediate Question [5]



Drag and Drop – This question is an extension of (3b) where the user will see 9 planets present at the right of the screen, and 9 white boxes laid out from a sun image. To answer this question they must hold click over the planet images and then drag them into one of the white boxes. In regards to the coding, simply the picture boxes initially holding the planets have been set so that they will let users copy their information, while the other ones have been designated for accepting the dropped information.

It is important to note that once the user has dragged a planet into the middle, the corresponding image on the right, and its name will disappear.

btnRestartQuestion – When clicked, this button will make all of the planets reappear, and will remove any previously dragged planets replacing them with the white box image. It will also reset all of the variables which can be changed within this question.

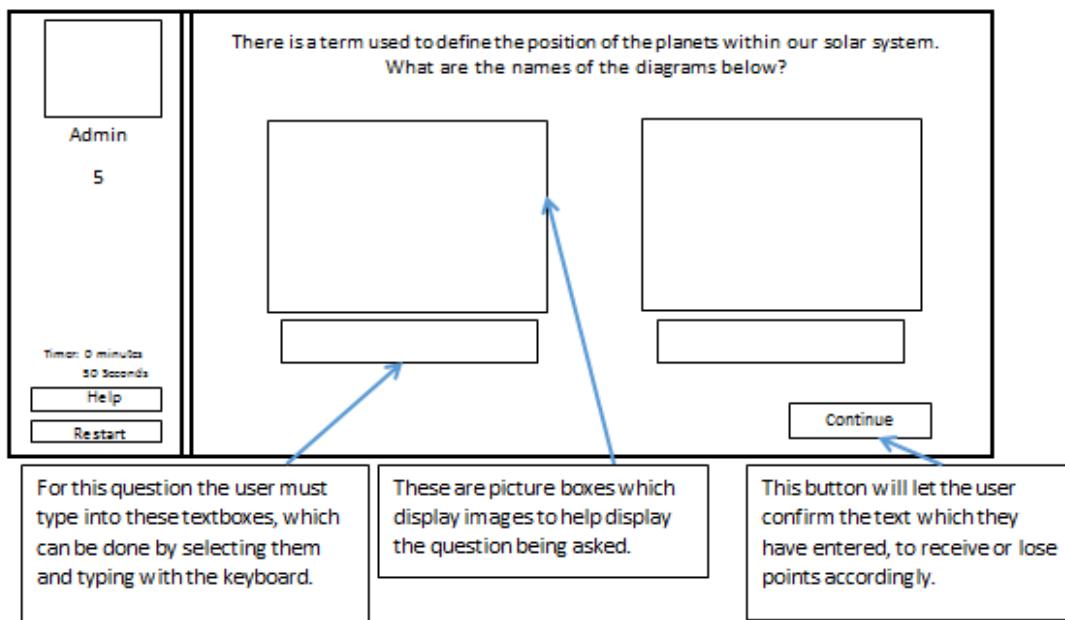
btnContinue – Once the user has completed dragging all of the planets, the continue button will become active. Once clicked it will check their answers and provide the according points, before loading a new form.

btnHelp – If the user selects this button it will open the help form.

btnRestart – Clicking this button will reset all of the variables present within the quiz, and will take the user back to the difficulty menu.

It is also worth noting that this form is assigned to a bool variable within an array. This is important because it stops the user from seeing the same question without restarting. It is also worth noting that all of these forms will display a user time. This is a variable which increase per second within each form.

Intermediate Question [6]



Text Boxes – For this question the user will have to provide an answer to the question within the two textboxes shown. Above both textboxes will be an image, which the user must name. In regards to the code, the textboxes will compare the users answer to the correct ones. If correct it will make a bool variable true.

btnContinue – Once the user has completed dragging all of the planets, the continue button will become active. Once clicked it will check their answers and provide the according points, before loading a new form.

btnHelp – If the user selects this button it will open the help form.

btnRestart – Clicking this button will reset all of the variables present within the quiz, and will take the user back to the difficulty menu.

It is also worth noting that this form is assigned to a bool variable within an array. This is important because it stops the user from seeing the same question without restarting. It is also worth noting that all of these forms will display a user time. This is a variable which increase per second within each form.

Intermediate Question [7]

On a clear day on June, John noticed that his shadow was pointing in a westerly direction, what time of day do you think it is?

Midday Morning

Early Evening Mid-afternoon

Admin
5
Timer: 0 minutes 50 Seconds
Help
Restart

For this question the user must select one of the four buttons shown above, selecting the correct one will increase their score, the wrong ones will decrease it.

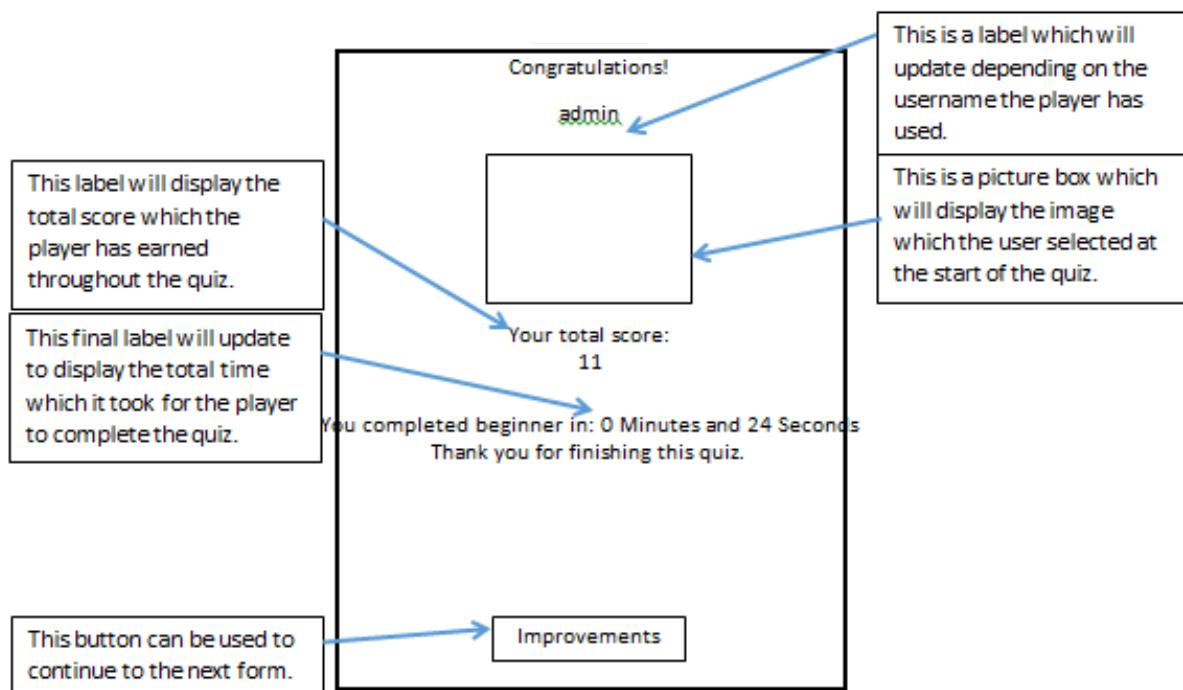
Multiple Choice - For this question the user will have to select one of the four buttons which best answers the question. Whenever the user selects the button, a timer containing the block of code used to select a new question will start. This will then cause a new form to load, and will also award or subtract the correct number of points from the users score.

btnHelp – If the user selects this button it will open the help form.

btnRestart – Clicking this button will reset all of the variables present within the quiz, and will take the user back to the difficulty menu.

It is also worth noting that this form is assigned to a bool variable within an array. This is important because it stops the user from seeing the same question without restarting. It is also worth noting that all of these forms will display a user time. This is a variable which increase per second within each form.

End Screen



Character Image – Within the login form, whenever the user selects their character Image a specific number variable within the range 1-4 will be chosen. Throughout the quiz and at the end now this number is called upon, and depending on the value a specific image will be displayed.

Username – When the user registers / Logins the username used will be saved to a global variable. Throughout the quiz, and at the end screen, this string will be called upon and written within `lblUsername`.

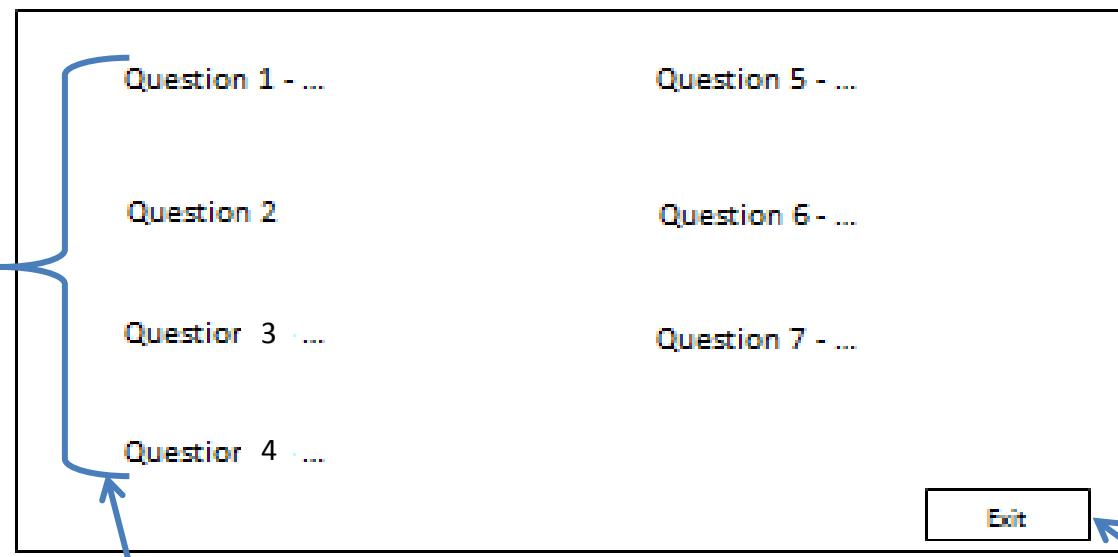
Score – Much like the username, the players score is kept within a variable, so that it will increase or decrease depending on their answers to the questions. This form will display the total end score.

Timer – Exactly like the other variables, this one is constantly increasing throughout the quiz after the user selects their difficulty, until they reach this end screen. It is displayed in minutes and seconds. This is done by writing a short piece of code with two different variables;

```
if (seconds = 60)
{
minutes += 1;
Seconds = 0;
} etc.
```

btnImprovements – This button will open the improvements screen when clicked, and hide this one.

Improvements Screen



These labels will display a specific message depending on whether or not the user has answered an answer correctly.

This button will simply close the quiz.

FeedBack – As mentioned within the other forms, there has been an array of bools which has kept track of the questions which the user has seen, and another stating whether or not they answers said question completely correct. At this point in time, these variables will be called upon, so that the user will only see the labels which correspond to their quiz. This means that someone who answered 3, 4, 2, 5, and 1 will not see `lblQuestion6` or `lblQuestion7`. I have also created two different messages for each label, and whether or not they have answered the question correctly will dictate which text appears.

btnExit – As mentioned above, this button simply closes the entire quiz, ending it.

Testing

Test Table

Test number + range	Form Name	Data being tested	Expected outcome	Actual outcome	Correction	Page of evidence
[Test 1] (1a – 1c)	Splash screen	The loading bar and text.	The loading bar should increase over the span of 5 seconds, and the loading text should change accordingly.	The loading bar increased accordingly, the text changed when the bar passed 0%, 30% and 70%.	[None]	Page 68
[Test 2] (2a – 2d)	Login	Character selection.	When the character selects a new character, it should inform the user what image is currently selected	Initially I had it set up where a message window would open up displaying the character title when the player selected an image.	I have actually changed this system, so that there is a label above the character selection area, which changes depending on the character selected.	Page 69 - 70
[Test 3] (3a – 3b)	Login	The error messages.	If the character does not enter the correct login information, an error message will appear informing them.	The error message appears as it is supposed to, telling the user that they the password or username is incorrect.	[None]	Page 71

[Test 3] (3b - 3c)	Login	The error messages	If the character has entered the correct login information, yet has not selected a character, the message will tell them to do so.	The error message appears as intended, and tells the user that they must choose an avatar.	[none]	Page 71
[Test 4] (4a)	Registration	Error message.	If the user has not entered any information into the text boxes, they will not be allowed to register.	The Error message stays active until the user has entered information into the boxes.	[None]	Page 72
[Test 4] (4b)	Registration + Login	Login information.	Once registered the login information should change accordingly	Once the user has registered their new information, the registration form will close and they can then login.	[None]	Page 72
[Test 4] (4b)	Login	Loading bar and text.	Once the correct information has been entered, and a character has been selected, the next form should load.	If the correct information has been entered and a character has been selected, a loading bar will appear.	[None]	Page 72

	Any form	Help button	Clicking this button should open up the help form as a separate window from any form.	The form will open when the button is pressed, and does not affect the user's progress within the quiz.	[None]	[Throughout the evidence shown]
[Test 5] (5a – 5e)	Help Screen	Drop down box	If the user selects one of the items within the drop down box, text should appear to provide help with the corresponding subject.	The text will all appear accordingly	[None]	Page 73 - 74
[Test 6] (6a)	Difficulty	Clicking the beginner button.	Once this button has been selected, a random question form from the list of seven I have created should open.	A random question will load from the beginner pool.	[None]	Page 75
[Test 6] (6b)	Difficulty	Clicking the intermediate button.	Once this button has been selected, a random question form the seven I have created for intermediate should open.	A random question from the intermediate pool will open.	[None]	Page 75
	Throughout the quiz	The timer	I have set up a system where the timer should count up accurately, and adjust the displayed text	The timer will continuously count up throughout the quiz, and will adjust to minutes	[None]	[Throughout the evidence]

			accordingly. On top of this it should adjust to minutes.	every 60 seconds.		shown]
	Throughout the quiz	The score system.	I have set up a system where the quiz will display the players score, this score can be increased by answering questions correctly and accurately.	Every time the user answers an answer correctly, they will be provided with the correct amount of points.	[None]	[Througho ut the evidence shown]
[Test 7] (7a)	Beginner Question form [1]	Clicking the correct answer.	Clicking the correct answer should open up another random question form the list I have created while also adding a point to the players score.	Clicking on the correct answer will award the user with a point and will then open up a new form.	[None]	Page 76
[Test 7] (7b)	Beginner Question form [1]	Clicking an incorrect answer.	Clicking an answer which is not correct should remove a point from the user and load a new form.	Once the user selects an answer which is not correct, a point will be subtracted from their score, and a new question will load.	[None]	Page 77
[Test 8] (8a – 8f)	Beginner Question form	Dragging the answers	If the user clicks on one of the buttons, the cursor will change and they will then	When the user drags a button into a designated area, the button will	[None]	Page 78 - 82

	[2]		be able to drag and drop the item into one of the designated areas.	disappear and the information will be transferred.		
[Test 8] (8e)	Beginner Question form [2]	When the user clicks the reset button	The entire form should reset, with all of the dragged buttons reappearing and any previously dragged information being wiped.	Everything words accordingly, with one issue being that the lines showing where to place the information do not centre.	[None]	Page 80
[Test 8] (8a)	Beginner Question form [2]	Correct Answers	When the user clicks the button to continue, if all of the dragged answers are correct, they will receive the max number of points.	All of the points are given accordingly and the next question loads.	[None]	Page 78
[Test 8] (8b – 8d)	Beginner Question form [2]	Incorrect Answers	When the clicks the button to continue, and some or all of the answers are incorrect, they will receive the points which they deserve, yet will lose points for any they answer incorrectly.	Initially there was an issue where the user would not lose the correct amount of points.	I had accidentally added a section twice, so that the user would receive extra points. This has been removed however, and the points will now	Page 79 - 80

					either be removed or added accordingly.	
[Test 8] (8f)	Beginner Question form [2]	Different drag options	For this test, I want to show that all of the buttons present within the middle of the screen are drag able, and will be accepted by any of the designated locations.	The screenshots provide numerous examples of where different pieces of information could be dragged. This works quite flawlessly, other than it sometimes being hard to land on the designated area.	[None]	Page 81 – 82
[Test 9] (9a – 9b)	Beginner Question form [3]	Continue button	When the user has dragged all of the items needed, the continue button which is currently inactive and greyed out, will become active, letting the user continue.	When all of the planets have been dragged, the button to continue will become active, letting the user continue.	[None]	Page 83 - 84
[Test 9] (9a)	Beginner Question form [3]	Correct Answers	When the user has dragged all of the correct answers, and has clicked the continue button, they should receive all of the points deserved.	The user will receive all 5 points for answering the question 100% correctly.	[None]	Page 83

[Test 9] (9b)	Beginner Question form [3]	Incorrect Answers	If the user clicks the continue button, and all of the answers are incorrect, they should have points sub-tracked from them.	The user will lose points, depending on the number of planets are placed incorrectly.	[None]	Page 84
[Test 9] (9c)	Beginner Question form [3]	Different drag options	For this question the user has the ability to drag a variety of planets into the correct locations. I want to show that the user has the ability to drag any planet into any of the designated areas without errors.	The screenshots provided show that each picture box has the ability to hold any of the dragged planets. This means that the user can place them in any order etc.	[None]	Page 85 + 86
[Test 10] (10a)	Beginner Question form [4]	Correct Answer	When the user selects the correct answer, the user will receive a point, and a new question will load.	When the user clicks on the correct answer their score will increase by 1, and an unused question will load.	[None]	Page 87
[Test 10] (10b)	Beginner Question form [4]	Incorrect Answer	If the user clicks on one of the incorrect answers, they should lose a point, and a new question from the intermediate pool should load.	When the user clicks on one of the incorrect answers a new question will indeed load, and they will lose a point.	[None]	Page 88

[Test 11] (11a)	Beginner Question form [5]	Correct Answer	When the user clicks on the correct answer, they will receive a point, and a new question from the beginner pool will load.	When the correct answer is selected, the player's score will increase by 1 point.	[None]	Page 89
[Test 11] (11b)	Beginner Question form [5]	Incorrect Answer	When the user clicks on one of the incorrect answers, they will lose a point and the new question will load.	When the player clicks on one of the incorrect answers, they will lose a point.	[None]	Page 90
[Test 12] (12a –12e)	Beginner Question form [6]	Error and continue button	When the user has checked three of the statements, the continue button - which is currently inactive and discoloured - will become active letting the user lock in their answers.	The continue button on this form will not be active unless the player has selected exactly three items. This means that the player cannot click continue until then.	[None]	Page 91 - 94
[Test 12] (12a)	Beginner Question form [6]	Correct Answers	When the user hits continue, if the answers which they have selected are correct, the user should receive 3 points and a new question should load.	If the user submits the three correct answers, they will receive 3 points and then a new question from the intermediate pool will load.	[None]	Page 91

[Test 12] (12b – 12d)	Beginner Question form [6]	Incorrect Answers	If the user clicks the continue button, yet all of the answers which they have selected are incorrect, they will lose 3 points and a new question should load.	If the user locks in all of the incorrect answers, they have 3 points subtracted from their score, and a new question from the intermediate pool will load.	I ran into an issue where the player would not receive the correct amount of points for the question.	Page 92 - 93
[Test 12] (12e)	Beginner Question form [6]	Other options	For this test I wanted to make sure that the user could select a variety of different answer combinations and still have the question work properly.	As long as the user has selected exactly three answers they will have the ability to confirm the question and continue the quiz.	[None]	Page 93 + 94
[Test 13] (13a)	Beginner Question form [7]	Correct Answer	If the user selects all of the correct answers and clicks the continue button, they should receive 3 points to their overall score, and a new question from the beginner's pool will load.	When the user clicks the continue button, and all of the correct answers have been selected, they will receive three points, and a new question from the beginner's pool will load.	[None]	Page 95

[Test 13] (13b)	Beginner Question form [7]	Incorrect Answer	If the user selects answers which are not correct, they should lose points corresponding to the incorrect answers.	If they user answer the question will all incorrect answers, they will lose three points from their total score. In this same regard, if they only answer one incorrect, they will receive two points, but also lose one of them.	[None]	Page 96
[Test 14] (14a)	Intermediate Question form [1]	Correct Answer	This question will have four answers, if the correct one is selected, they should receive a point and a new question should be loaded.	When the user selects the correct answer, they will be provided with a point, and a new question will load.	[None]	Page 97
[Test 14] (14b)	Intermediate Question form [1]	Incorrect Answer	If one of the incorrect answers is selected however, the user will lose a point.	When the user selects one of the three incorrect answers, they will lose a point from their total score, and a new question will appear.	[None]	Page 98

[Test 15] (15a)	Intermediate Question form [2]	Correct Answer	For this question, the player must select one of the various answers which I have provided within three different list boxes to finish a sentence. If the three correct answers have been selected, the user should receive three points, and a new question will load.	When the user clicks the confirm button, and all of the answers which they have selected are correct, they will receive three points, and a new question be loaded.	[None]	Page 99
[Test 15] (15b)	Intermediate Question form [2]	Incorrect Answer	If the user has selected incorrect answers and have confirmed their selection, they should lose points corresponding to the number of questions which they have answered incorrectly.	When the user submits answers which are incorrect, they will lose points. This means that if they have selected all of the answers which they have selected are incorrect, they will lose three points.	[None]	Page 100

[Test 16] (16a)	Intermediate Question form [3]	Correct Answer	This question requires the user to type in the answers to finish the sentences. This means that if all correctly, they should receive three points.	If the user types in the correct answers, they will receive the corresponding points. This means that if they answer all questions correctly, they will receive three points.	[None]	Page 101
[Test 16] (16b)	Intermediate Question form [3]	Incorrect Answer	If the wrong answers are typed in, the player should lose score.	If the user types in one of the wrong answers, they will lose a point. This works for all of the textboxes, meaning that the user could lose a total of three points.	[None]	Page 102
[Test 16] (16c)	Intermediate Question form [3]	Other options	For this test I wanted to show that the user has the ability to enter any manner of answer into the text boxes, and that the question will still function.	As expected, the user will have the ability to continue the quiz even if they answer incorrect text.	[None]	Page 102
[Test 17] (17a)	Intermediate Question form [4]	Correct Answer	For this question the user must select four statements from a list of eight set statements. The	The user will receive the correct amount of points corresponding to the amount of answers which	[None]	Page 103

			<p>user must select the statements which they believe to be correct. On top of this if for every correct answer selected, the user will receive a point.</p> <p>This means that the user will receive a total of four points if all of the correct answers are selected.</p>	they get correct, when they press the button.		
[Test 17] (17b)	Intermediate Question form [4]	Incorrect Answer	Opposite of the last test, for every answer which the user gets incorrect, they should lose a point. This would mean that the user should lose a total of four points if all answers are incorrect.	For each incorrect answer, the users overall score will decrease by one. This means that they could lose a total of four points within this question.	[None]	Page 104
[Test 17] (17c)	Intermediate Question form [4]	Other options	For this test I wanted to show that the user could select any combination of answers within the question. I also want to	As long as the user has selected exactly four check boxes selected, they will have the ability to continue, and will		Page 104 - 105

			ensure that it still lets the user continue properly.	receive the correct number of points.		
[Test 18] (18a)	Intermediate Question form [5]	Correct Answer	<p>This question is once again a drag and drop, where the user must drag various planets.</p> <p>For this question the user will gain a point for each planet dragged into the correct area. This also means that the user should be able to collect a total of nine points within this question.</p>	The players score will increase by one for each planet placed correctly, and can collect a total of nine points this question.	[None]	Page 107
[Test 18] (18c)	Intermediate Question form [5]	Incorrect Answer	The user should lose a point for each planet placed incorrectly.	When the player submits their answers, they will lose a point for each of the planets which are not placed within the correct area. This means that the player could lose a total of nine points on this question.	[None]	Page 108

[Test 18] (18d)	Intermediate Questions form [5]	Different drag options	The user should be able to drag any of the planets present on screen into the designated areas on the form.	I wanted to show that this was correct, hence the numerous screenshots. These help show that each designated area can display any of the dragged planets, with no errors.	[None]	Page 109 – 110
[Test 19] (19a)	Intermediate Question form [6]	Correct Answers (capitals)	<p>It is also notable that these questions can be answered with text which starts with a capital letter.</p> <p>Yet the question should still work properly.</p>	The user will still receive the appropriate amount of points depending on the amount of questions which they answer correctly.	[None]	Page 111
[Test 19] (19b)	Intermediate Question form [6]	Correct Answer (No capitals)	For this question the user must type in their answers to the question. If the correct answers are typed in the user should receive a point for each question.	When the user types in the correct answers without capitals, they will receive a point for each question. This means that they could collect a total of two points.	[None]	Page 112

[Test 19] (19c)	Intermediate Question form [6]	Incorrect Answer	If the user types in the incorrect answer, they should lose the appropriate amount of points.	The user will lose one to two points depending on the amount of answers which are incorrect.	[None]	Page 112
[Test 20] (20a)	Intermediate Question form [7]	Correct Answer	For this question the player must select one of four answers. One of these answers when clicked will give the player one extra point.	Clicking the correct answer will increase the players overall score by one, and will load a new form.	[None]	Page 113
[Test 20] (20b)	Intermediate Question form [7]	Incorrect Answer	If the player selects one of the incorrect answers, they should lose a point.	Clicking on one of the incorrect answers will cause the players overall score to decrease by one.	[None]	Page 114
[Test 21]	End Screen [Test 21]	Player details	When this form loads, it should display all of the information throughout the form, including the players name, image, score and time.	In my tests I found that all of the statistics display properly within this form.	[None]	Page 115

[Test 21]	End Screen	Form loading	This form should load after the player has answered five questions.	In all of the instances where I tested this, the end screen will always appear after answering the fifth question.	[None]	Throughout the evidence shown]
[Test 22]	Improvement screen	Form complete	I have seven labels, and each one is linked to a specific question form. I only want the labels connected to the questions answered to show.	The user will only see labels which correspond to the question they have answered.	[None]	Page 115 - 116
[Test 22]	Improvement screen	Correct / Incorrect labels	I have set it so that the labels should display different messages depending on whether or not the user has answered the question completely correctly or not.	The system recognises which questions were answered completely correct, and tells the user so. Otherwise a message will tell them to try again.	[None]	Page 115 + 116
[Test 23] (23a)	New Registration form	New login details	I created a test to see if the login files could save the users new login details	Initially there were some issues with finding and accessing the file. This issue would typically	After some working with the code and location, I believe that I have it working	Page 117

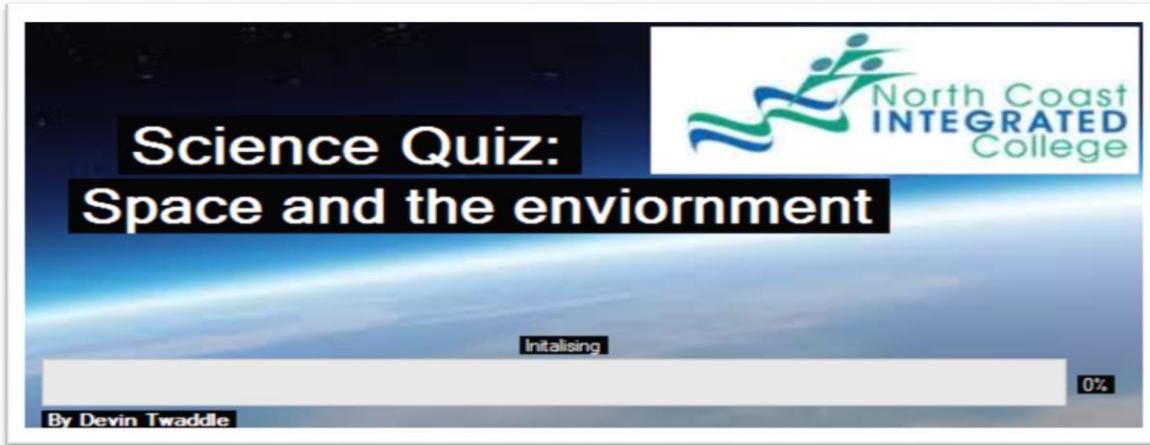
Software systems

			to a notepad file.	cause a crash within the system.	so that the notepad will remember the last user.	
[Test 23] (23b)	New Login form	New login Details	Now the system has to be able to read the information from the notepad, and compare it to that entered by the user.	Once again there were some errors which I ran into when creating this. Causing the program to crash.	I eventually got this working so that the program will remember the last user who logged in, and will let the user play.	Page 118

Quiz evidence (Screenshots)

Test 1 – Splash screen (Message change)

1a) *Loading 0%*



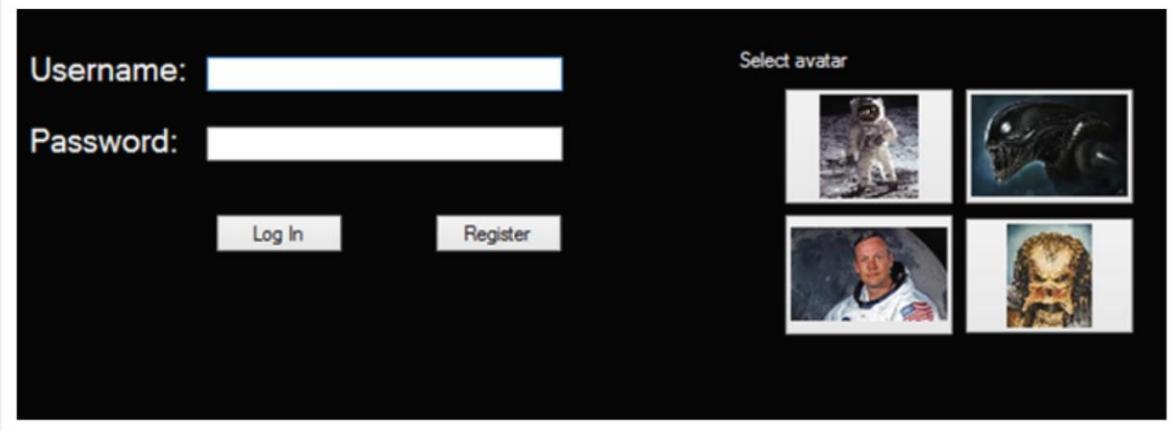
1b) *Loading > 30%*



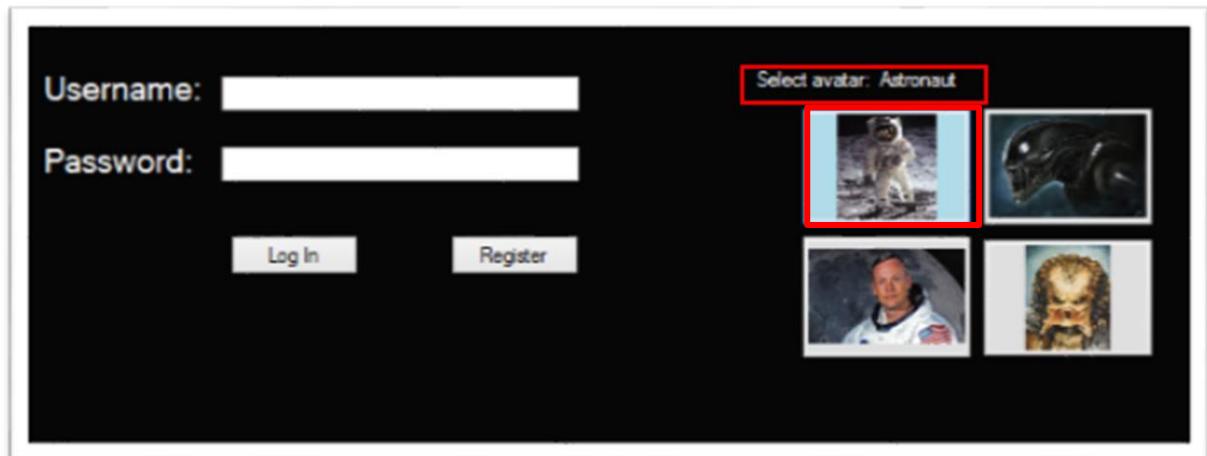
1c) *Loading > 70*



Test 2 – Login (selecting character)



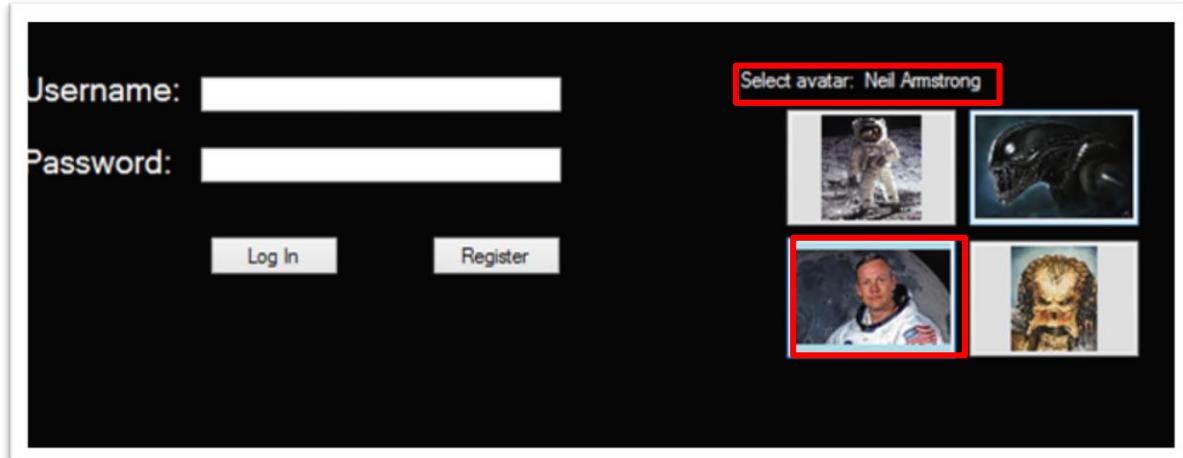
2a) Selecting Astronaut



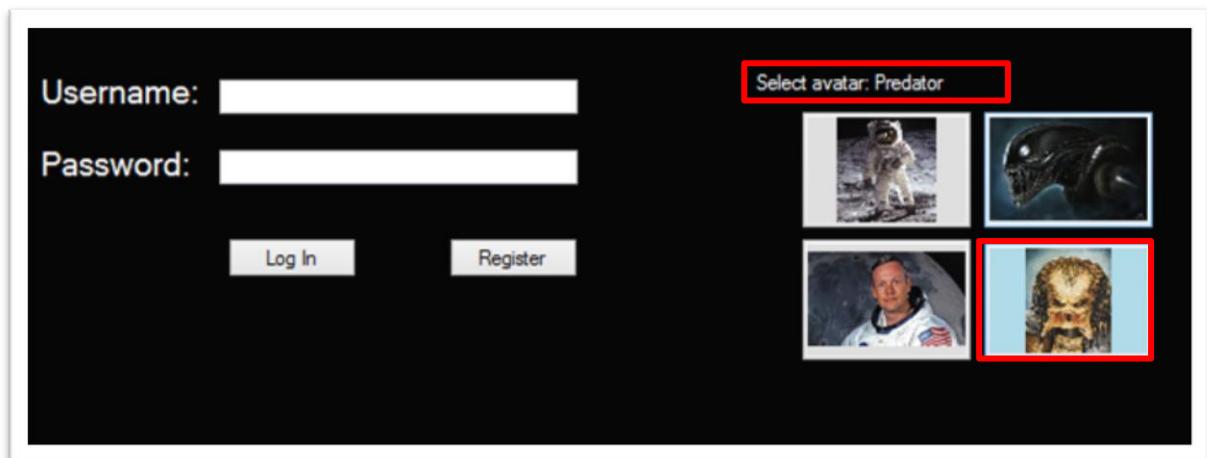
2b) Selecting Alien



2c) Selecting Neil Armstrong



2d) Selecting Predator



Test 3) Login Errors

3a) Leaving the boxes blank



The screenshot shows a login interface with a black background. On the left, there are input fields for 'Username' and 'Password'. Below them is an error message 'Username or Password is incorrect' enclosed in a red box. At the bottom are 'Log In' and 'Register' buttons. On the right, there is a 'Select avatar' section with four options arranged in a 2x2 grid. Each option consists of a small thumbnail image and the text 'Predator'.

3b) Incorrect Login information



This screenshot shows the same login interface as the previous one. The 'Username' field contains 'Random' and the 'Password' field contains '----'. The 'Username or Password is incorrect' message is again highlighted with a red box. The 'Log In' and 'Register' buttons are at the bottom. The 'Select avatar' section on the right shows the same four options as the first screenshot.

3c) Avatar not selected, login information correct

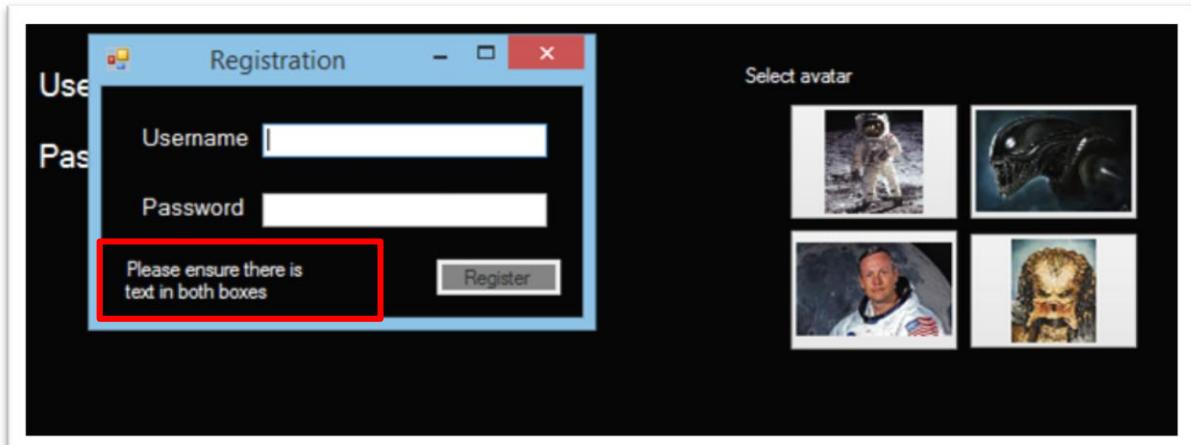


In this screenshot, the 'Username' field has 'admin' entered and the 'Password' field has '----'. The 'Please select a profile picture' message is highlighted with a red box. The 'Log In' and 'Register' buttons are at the bottom. The 'Select avatar' section on the right shows the same four options as the previous screenshots.

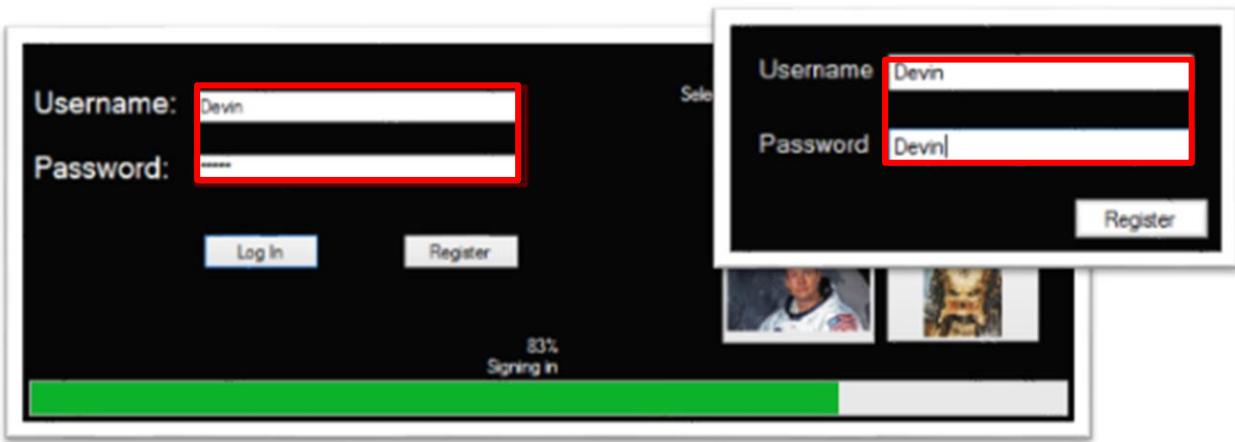
Test 4) Registration



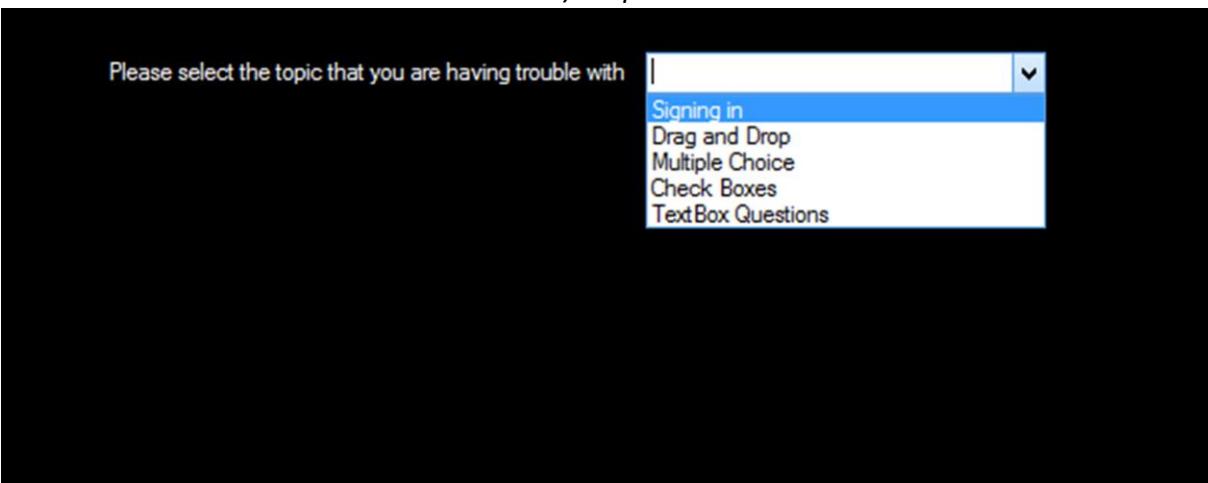
4a) Error message



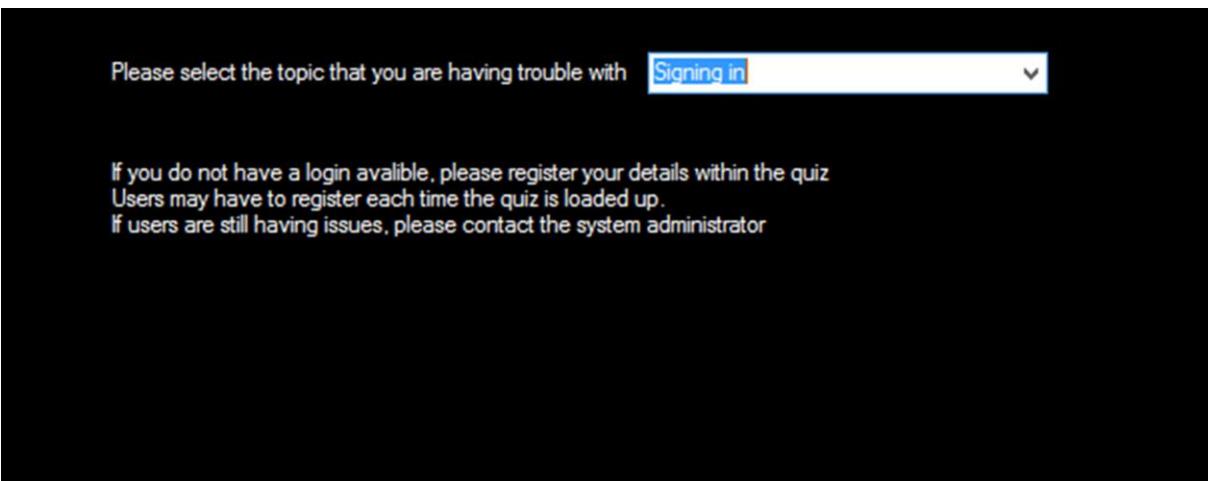
4b) Logging in with new details



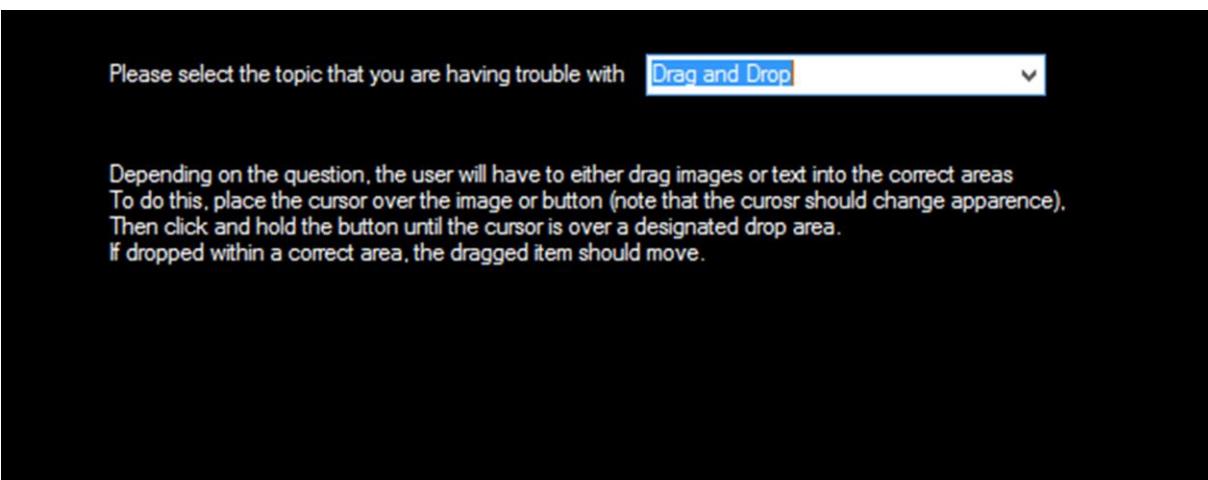
Test 5) Help Screen



Test 5a) Signing in Help



Test 5b) Drag and Drop Help



Test 5c) Multiple Choice Help

Please select the topic that you are having trouble with ▾

The questions which are multiple choice will have atleast two buttons, answering the question asked.
The user will have to select the answer which they believe to be correct.
Once an answer has been selected, a new question will load.
If the correct answer is selected, the user will recieve a point, else they will lose one

Test 5d) Check Box Help

Please select the topic that you are having trouble with ▾

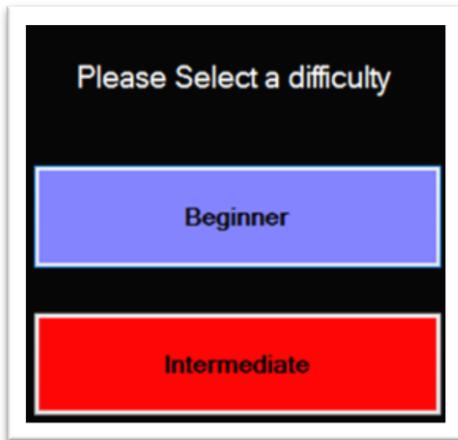
For these questions, the user will be presented with several different statements.
A stated number of these statements will be true.
The user will have to select the statements which they believe are correct, ticking the statement.
Once the stated number of statements have been selected, the continue button will become available.
The player will gain or lose the according amount of points and a new question will load.

Test 5e) Textbox Help

Please select the topic that you are having trouble with ▾

For these questions, the user will have to type in an answer to the question asked
There will typically be a hint in the form of a first letter or image to help the user.
However it is important to type any answers with capital letters.
Clicking continue will give or retract points and load a new question

Test 6) Difficulty menu



6a) Beginner (opens random question from beginner pool)

A screenshot of a software interface for a beginner question. On the left, a sidebar shows "admin" and "0". The main area has a timer at "2". The question asks: "Fossil fuels are a large to blame for global warming. Which of the below can be classified as fossil fuels?". It shows a photograph of a power plant with smokestacks. Below the image are six options: "Uranium", "Natural gases", "Coal", "Charcoal", "Bio-fuel", and "Oil". A "Continue" button is at the bottom right.

6b) intermediate (opens a random question from the intermediate pool)

A screenshot of a software interface for an intermediate question. On the left, a sidebar shows "admin" and "0". The main area has a timer at "3". The question asks: "Space is a [Sink, Vacuum, Mop]. This means that there is no [Nitrogen, Water molecules, Oxygen] in space. Due to these circumstances [Sound, Heat, Light] cannot travel through space.". It shows a background image of a planet and stars. A "Continue" button is at the bottom right.

Beginner Tests

Test 7) Beginner Question [1]

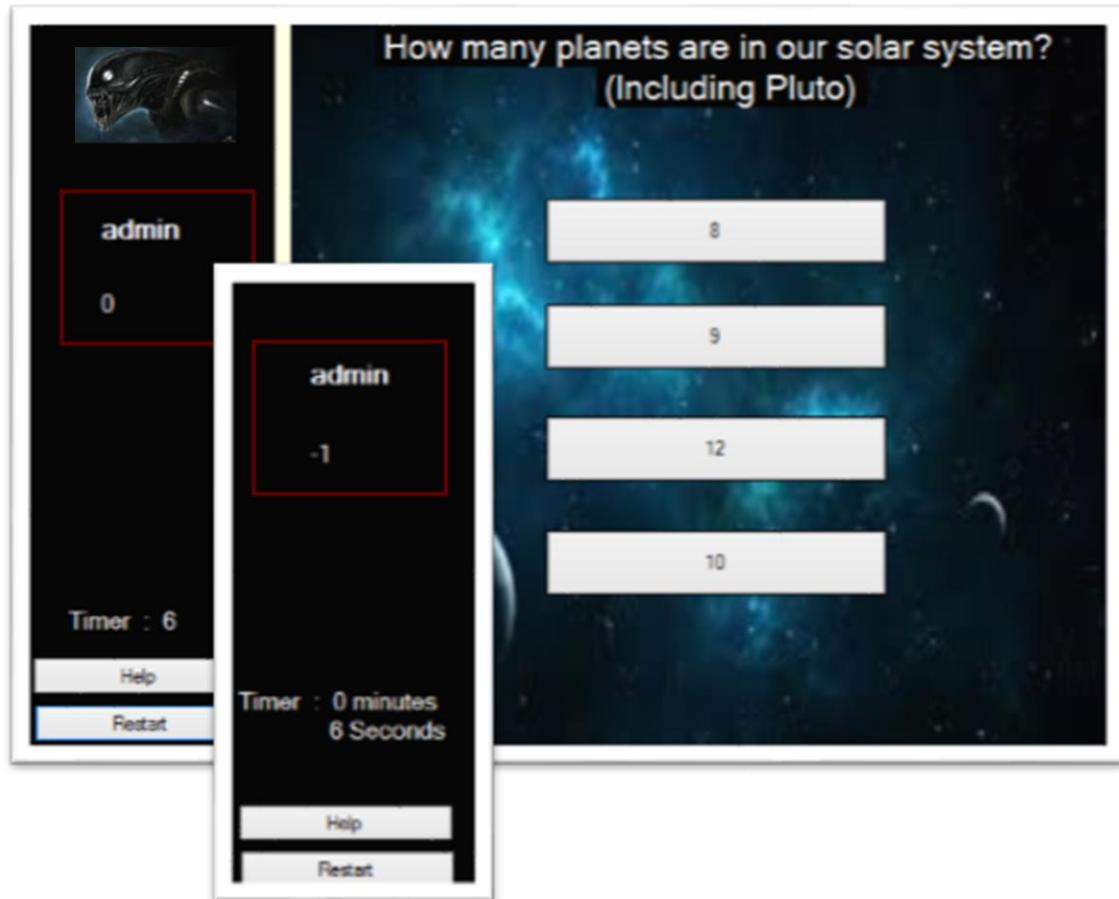
The screenshot shows a mobile application interface. On the left, there is a sidebar with a dark background. At the top of the sidebar is a small alien head icon. Below it, the word "admin" is displayed. Underneath "admin" is the number "0". Further down, the text "Timer : 6" is shown. At the bottom of the sidebar are two buttons: "Help" and "Restart", with "Restart" being highlighted in blue.

The main content area has a dark background with a space-themed image of a planet and stars. At the top, the text "How many planets are in our solar system? (Including Pluto)" is displayed. Below this are four answer options, each in a white rectangular box: "8", "9", "12", and "10".

7a) correct answer

This screenshot shows the same mobile application interface as the previous one, but with some changes. The sidebar on the left now shows "admin" with a red border around it, and the number "1" is displayed below it, indicating a score or level. The text "Timer : 6" remains at the bottom of the sidebar. The main content area shows the same question and answer options. A new timer value, "43", is displayed at the bottom of the sidebar. The "Help" and "Restart" buttons are visible at the bottom of the main screen.

7b) Incorrect Answer



Test 8) Beginner Question [2]

Are the following statements true or false
Drag the correct statements to the lines in the boxes

True

The Earth orbits the sun
The sun is the closest planet to the Earth
Our solar system is named after a chocolate bar
The sun is a star
The moon is a satellite
When the moon blocks the sun, it is a solar eclipse
Gravity is a man-made force
It is impossible for a sun to die

False

Confirm

8a) Correct answers (order does not matter)

Are the following statements true or false
Drag the correct statements to the lines in the boxes

True

The Earth orbits the sun
The sun is a star
The moon is a satellite
When the moon blocks the sun, it is a solar eclipse

False

The sun is the closest planet to the Earth
Our solar system is named after a chocolate bar
Gravity is a man-made force
It is impossible for a sun to die

Confirm

Reset Question

8b) Incorrect Answers [Issues with scoring system]

The screenshot shows a software interface with a timer on the left set to 0 minutes 20 seconds. The main area contains a question: "Are the following statements true or false" followed by "Drag the correct statements to the lines in the boxes". There are two columns of statements. The left column is labeled "True" and the right column is labeled "False".

True	False
The sun is the closest planet to the Earth	The Earth orbits the sun
Our solar system is named after a chocolate bar	The sun is a star
Gravity is a man-made force	The moon is a satellite
It is impossible for a sun to die	When the moon blocks the sun, it is a solar eclipse

Below the columns are "Content" and "Reset Question" buttons. At the bottom of the screen are "Help" and "Restart" buttons.

8c) Testing

The screenshot shows a software interface with a timer on the left set to 17 seconds. The main area contains a question: "Are the following statements true or false" followed by "Drag the correct statements to the lines in the boxes". There are two columns of statements. The left column is labeled "True" and the right column is labeled "False".

True	True	True	False
True	True	False	False

Below the columns are "Content" and "Reset Question" buttons. At the bottom of the screen are "Help" and "Restart" buttons.

8d) Incorrect Answers [Fixed]

The screenshot shows a software interface with a sidebar on the left and a main content area on the right.

Sidebar (Left):

- User icon: A black panther head.
- Username: admin
- Score: 0
- Timer: Timer : 0 minutes 13 Seconds
- Buttons: Help, Restart

Main Content Area (Right):

Question: Are the following statements true or false
Drag the correct statements to the lines in the boxes

True Box:

- The sun is the closest planet to the Earth
- Our solar system is named after a chocolate bar
- Gravity is a man-made force
- It's impossible for a sun to die

False Box:

- The Earth orbits the sun
- The sun is a star
- The moon is a satellite
- When the moon blocks the sun, it is a solar eclipse

Buttons at the bottom:

- Cancel
- Reset Question

8e) Clicking Reset

The screenshot shows the software interface after a reset, displaying a second question.

Sidebar (Left):

- User icon: A black panther head.
- Username: admin
- Score: 0
- Timer: Timer : 4 minutes 17 Seconds
- Buttons: Help, Restart

Main Content Area (Right):

Question: Are the following statements true or false
Drag the correct statements to the lines in the boxes

True Box:

- The sun is the closest planet to the Earth
- Our solar system is named after a chocolate bar
- Gravity is a man-made force
- It's impossible for a sun to die

False Box:

- The Earth orbits the sun
- The sun is a star
- The moon is a satellite
- When the moon blocks the sun, it is a solar eclipse

Question 2: Are the following statements true or false
Drag the correct statements to the lines in the boxes

True Box:

- The Earth orbits the sun
- The sun is the closest planet to the Earth
- Our solar system is named after a chocolate bar
- Gravity is a man-made force
- It's impossible for a sun to die

False Box:

- The sun is a star
- The moon is a satellite
- When the moon blocks the sun, it is a solar eclipse

Buttons at the bottom:

- Cancel
- Reset Question

8f) Different drag options

The screenshot shows a user interface with a sidebar on the left labeled "admin" and "0". The main area has a title "Are the following statements true or false" and instructions "Drag the correct statements to the lines in the boxes". There are two columns of statements:

True	False
The Earth orbits the sun	The moon is a satelite
The sun is the closest planet to the Earth	When the moon blocks the sun, it is a solar eclipse
Our solar system is named after a chocolate bar	Gravity is a man-made force
The sun is a star	It is impossible for a sun to die

At the bottom are "Confirm" and "Reset Question" buttons.

The screenshot shows a user interface with a sidebar on the left labeled "admin" and "0". The main area has a title "Are the following statements true or false" and instructions "Drag the correct statements to the lines in the boxes". There are two columns of statements:

True	False
The sun is the closest planet to the Earth	Our solar system is named after a chocolate bar
The Earth orbits the sun	The sun is a star
It is impossible for a sun to die	The moon is a satelite
When the moon blocks the sun, it is a solar eclipse	Gravity is a man-made force

At the bottom are "Confirm" and "Reset Question" buttons.

The screenshot shows a user interface with a sidebar on the left labeled "admin" and "0". The main area has a title "Are the following statements true or false" and instructions "Drag the correct statements to the lines in the boxes". There are two columns of statements:

True	False
Our solar system is named after a chocolate bar	It is impossible for a sun to die
The sun is a star	The Earth orbits the sun
The moon is a satelite	The sun is the closest planet to the Earth
Gravity is a man-made force	When the moon blocks the sun, it is a solar eclipse

At the bottom are "Confirm" and "Reset Question" buttons.

Software systems

admin
0
Timer : 492
Help
Restart

Are the following statements true or false
Drag the correct statements to the lines in the boxes

True
The sun is a star
Our solar system is named after a chocolate bar
The Earth orbits the sun
The sun is the closest planet to the Earth

False
When the moon blocks the sun, it is a solar eclipse
Gravity is a man-made force
It is impossible for a sun to die
The moon is a satalite

Confirm
Reset Question

admin
0
Timer : 555
Help
Restart

Are the following statements true or false
Drag the correct statements to the lines in the boxes

True
The moon is a satalite
When the moon blocks the sun, it is a solar eclipse
Gravity is a man-made force
It is impossible for a sun to die

False
The Earth orbits the sun
The sun is the closest planet to the Earth
Our solar system is named after a chocolate bar
The sun is a star

Confirm
Reset Question

admin
0
Timer : 677
Help
Restart

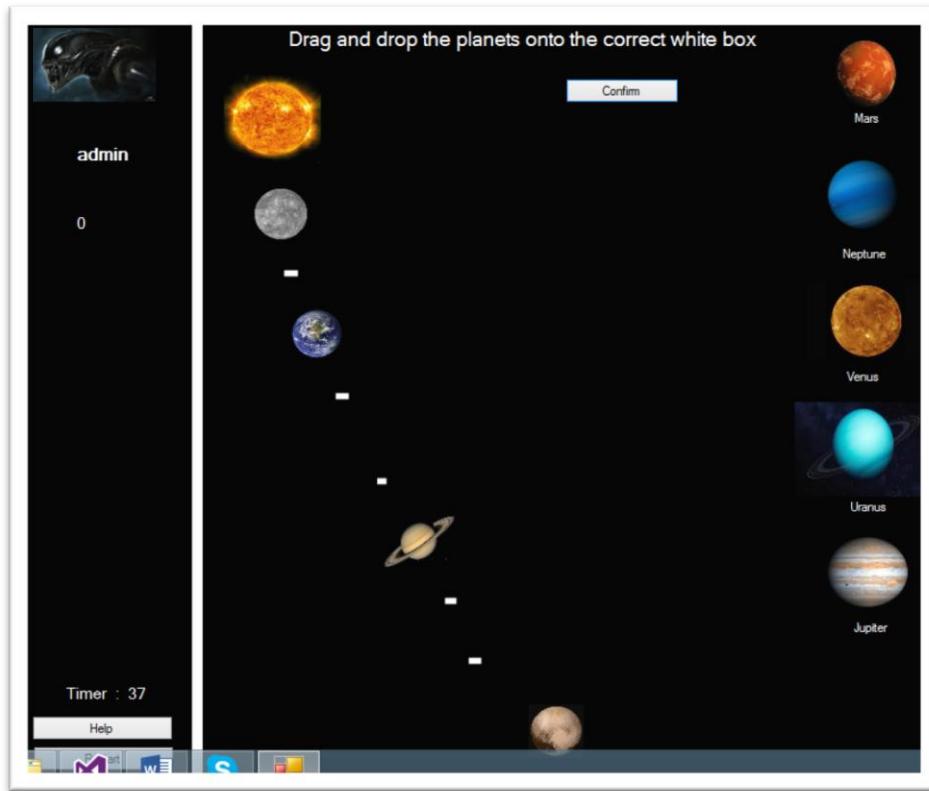
Are the following statements true or false
Drag the correct statements to the lines in the boxes

True
When the moon blocks the sun, it is a solar eclipse
The moon is a satalite
The sun is the closest planet to the Earth
The Earth orbits the sun

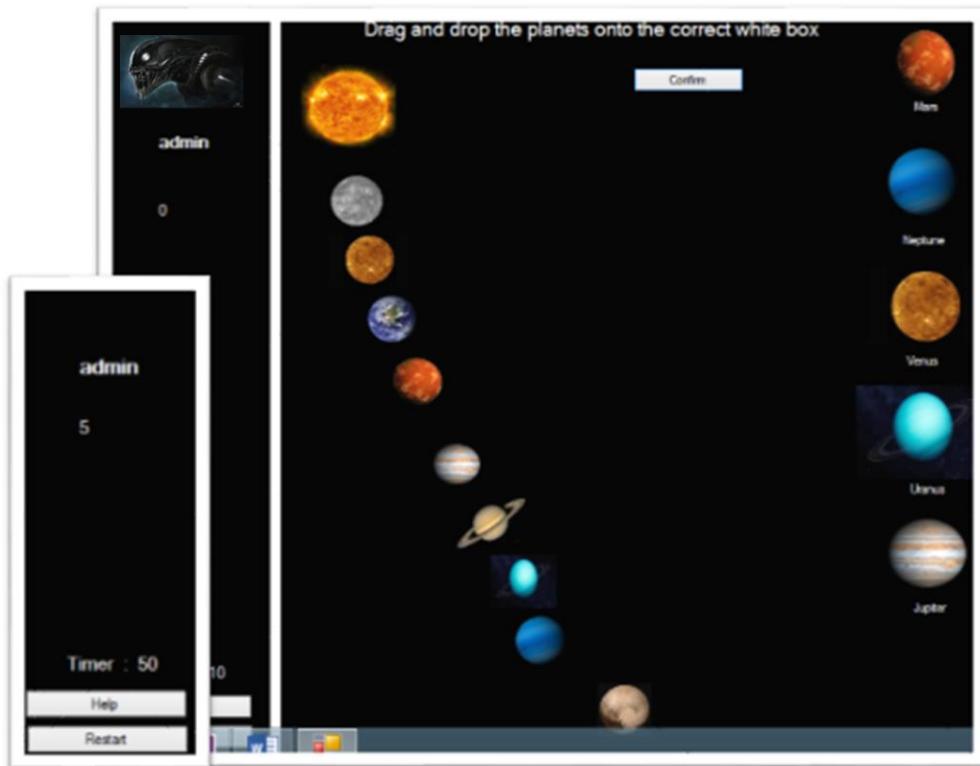
False
The sun is a star
Our solar system is named after a chocolate bar
It is impossible for a sun to die
Gravity is a man-made force

Confirm
Reset Question

Test 9) Beginner Question [3]



9a) Correct answers



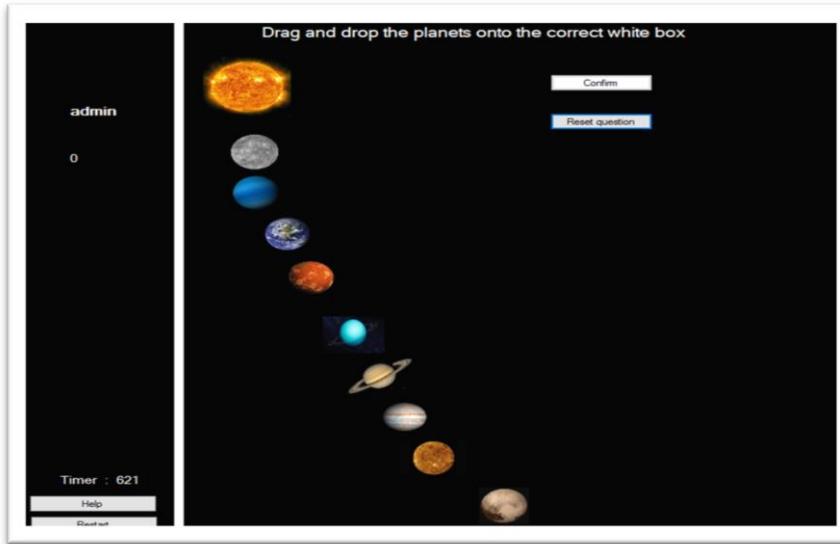
9b) Incorrect Answers

The screenshot shows a software interface with a dark theme. On the left, there is a sidebar with a user icon, the name "admin", and a score of "0". Below this, the user information is repeated: "admin" and "-5". A timer is displayed as "Timer : 1 minutes 41 Seconds". At the bottom of the sidebar are two buttons: "Help" and "Restart".

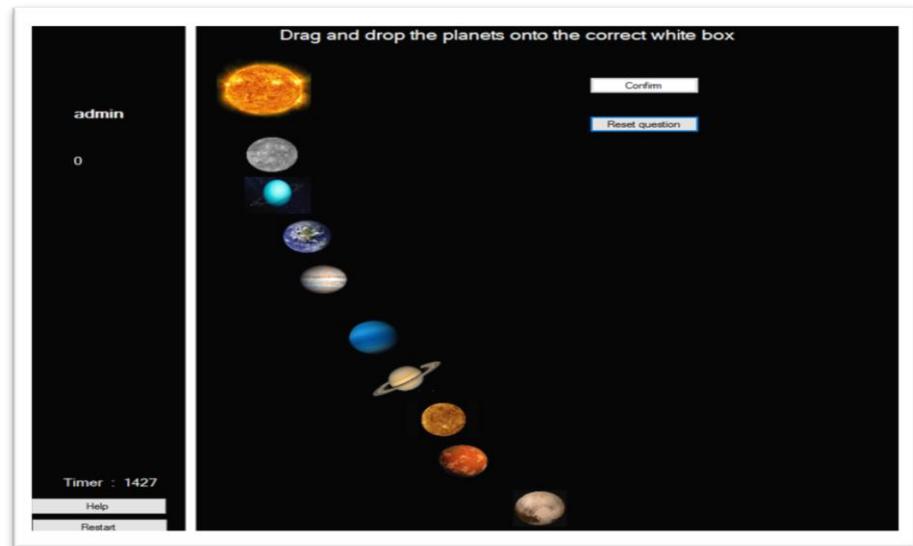
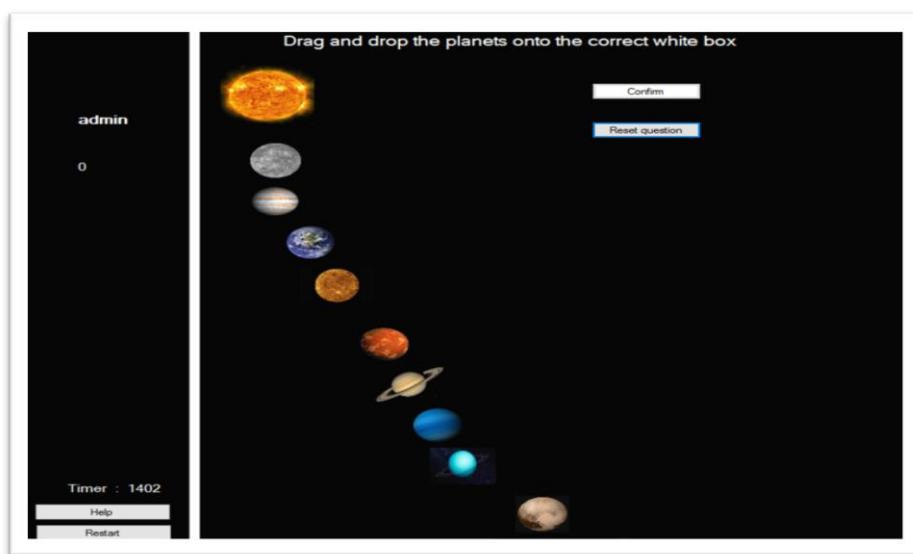
The main area contains a game titled "Drag and drop the planets onto the correct white box". It features a vertical stack of nine planets: Sun, Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. To the right of the stack are two buttons: "Confirm" and "Reset question".

The planets are currently arranged in descending order of size from top to bottom, starting with the Sun at the top.

9c) Different drag options



Software systems



Test 10) Beginner Question [4]

admin
0
Timer : 3
Help
Restart

Why is the sun located at the centre of our solar system?

Merely by chance, any planet could take it's place.

The sun has the largest mass of any object in our solar system

The Sun isn't, the Earth is...

Aliens?

10a) Correct Answer

admin
0
admin
1
Timer : 184
Help
Restart

Why is the sun located at the centre of our solar system?

Merely by chance, any planet could take it's place.

The sun has the largest mass of any object in our solar system

The Sun isn't, the Earth is...

Aliens?

10b) Incorrect Answers

The application interface shows a question card and a sidebar.

Question Card:

Why is the sun located at the centre of our solar system?

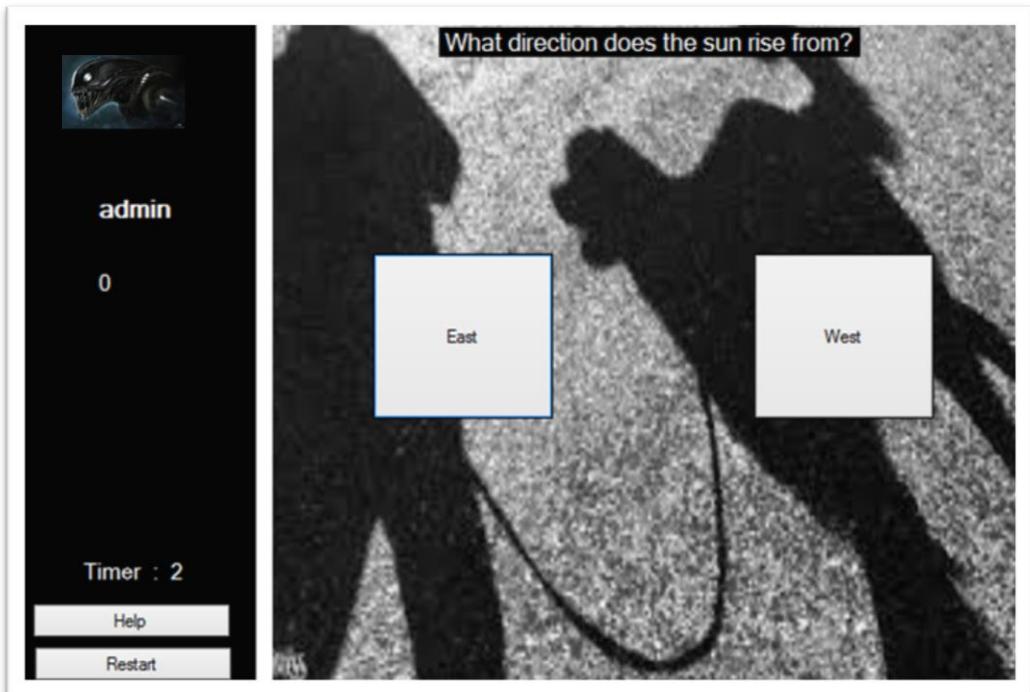
Four incorrect answers are listed in boxes:

- Merely by chance, any planet could take it's place.
- The sun has the largest mass of any object in our solar system
- The Sun isn't, the Earth is...
- Aliens?

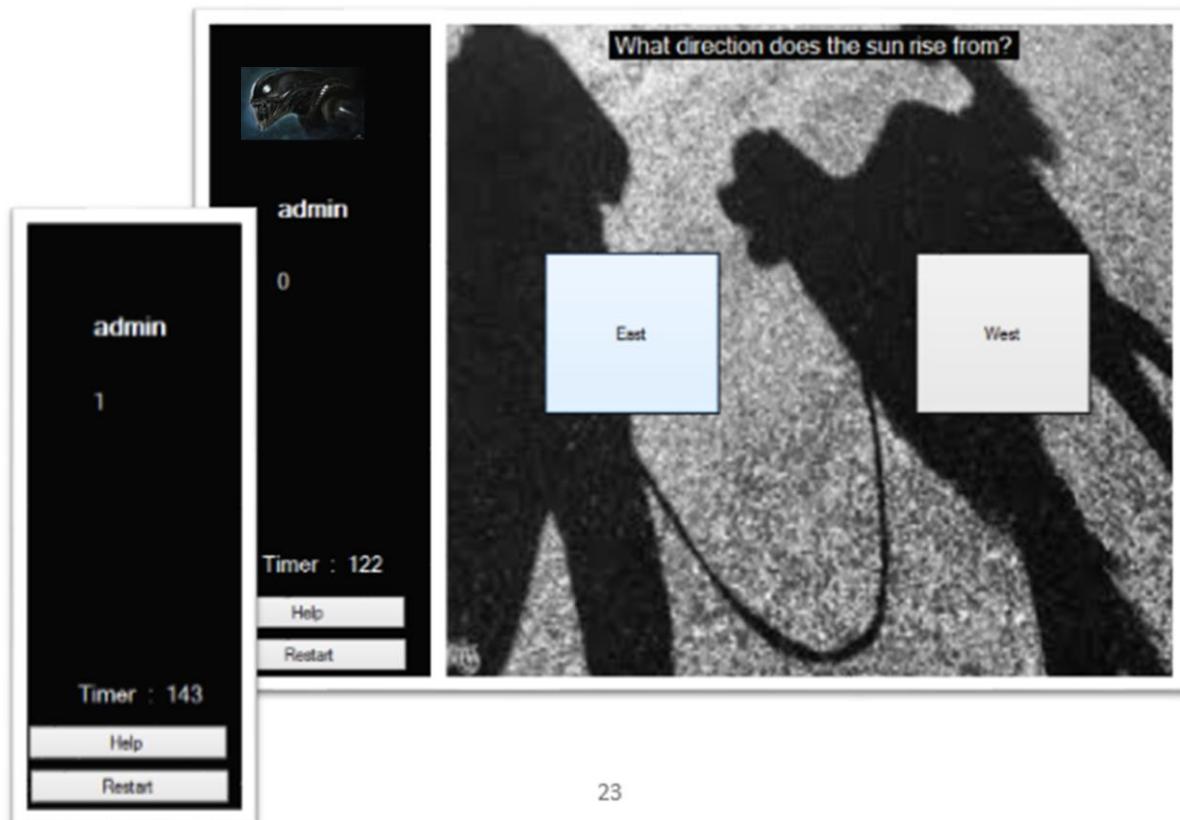
Sidebar:

- User icon: Alien head
- User name: admin
- Score: 0
- Timer: 0 minutes 6 Seconds
- Buttons: Help, Restart

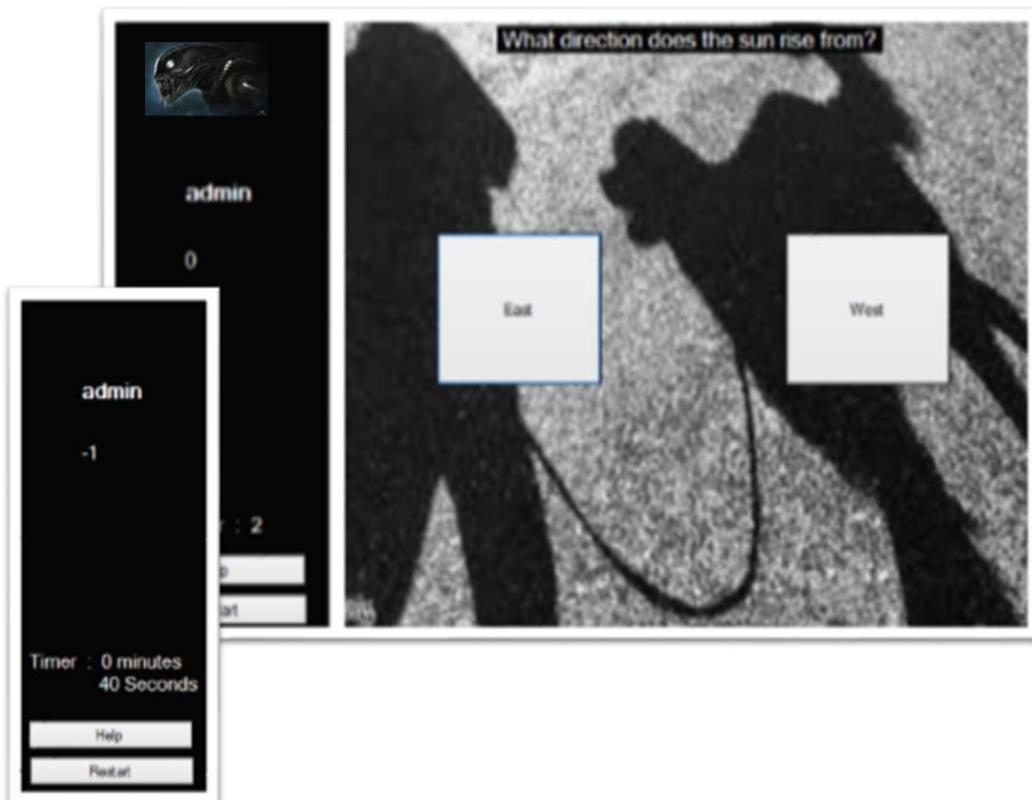
Test 11) Beginner Question [5]



11a) Correct Answer



11b) Incorrect Answer



Test 12) Beginner Question [6]

The screenshot shows a software interface with a dark theme. On the left, there is a sidebar with a user icon, the name "admin", a score of "0", and a timer of "Timer : 4". Below the timer are "Help" and "Restart" buttons. The main area contains a question: "Fossil fuels are a large to blame for global warming" followed by "Which of the below can be classified as fossil fuels". Below the question is a photograph of a power plant with several tall smokestacks emitting smoke. Overlaid on the image are six options, each with a checkbox: "Uranium", "Natural gases", "Coal", "Charcoal", "Bio-fuel", and "Oil". In the bottom right corner of the main area is a "Continue" button.

12a) Correct Answers

This screenshot shows the same software interface after the user has selected the correct answers. The sidebar now shows a score of "3". The main area displays the same question and image as before, but the checkboxes for "Coal", "Oil", and "Natural gases" are now checked, while the others remain unchecked. The "Continue" button is still visible in the bottom right.

12b) Incorrect Answers (Scoring issues)

The screenshot shows a software interface with a sidebar on the left and a main content area on the right.

Left Sidebar:

- User icon: A blue alien-like head.
- User name: admin
- Score: 0
- Timer: 0 minutes 6 Seconds
- Buttons: Help (disabled), Restart

Main Content Area:

Text: Fossil fuels are largely to blame for global warming
Which of the below can be classified as fossil fuels

Image: A photograph of a power plant with several tall smokestacks emitting smoke against a blue sky.

Options:

- Uranium
- Coal
- Bio-fuel
- Natural gases
- Charcoal
- Oil

Buttons: Continue

12c) Testing

The screenshot shows a software interface with a sidebar on the left and a main content area on the right.

Left Sidebar:

- User icon: A blue alien-like head.
- User name: admin
- Score: 0
- Timer: 1 minutes 8 Seconds
- Buttons: Help (disabled), Restart

Main Content Area:

Text: Fossil fuels are largely to blame for global warming
Which of the below can be classified as fossil fuels

Image: A photograph of a power plant with several tall smokestacks emitting smoke against a blue sky.

Options:

- Uranium
- Coal
- Bio-fuel
- Natural gases
- Charcoal
- Oil

Buttons: Continue

12d) Incorrect Answers [Fixed]

The screenshot shows a software interface with a sidebar on the left and a main content area on the right.

Left Sidebar:

- Profile picture of a black panther-like creature.
- User name: admin
- Score: 0
- Timer: 1 minutes 8 Seconds
- Buttons: Help, Restart

Main Content Area:

Text at Top: Fossil fuels are largely to blame for global warming
Which of the below can be classified as fossil fuels

Image: A photograph of a power plant with several tall smokestacks emitting smoke against a blue sky.

Options:

- Uranium
- Natural gases
- Coal
- Charcoal
- Bio-fuel
- Oil

Buttons: Continue

12e) Other possibilities

The screenshot shows a software interface with a sidebar on the left and a main content area on the right.

Left Sidebar:

- Profile picture of a black panther-like creature.
- User name: admin
- Score: 6
- Timer: 17
- Buttons: Help, Restart

Main Content Area:

Text at Top: Fossil fuels are largely to blame for global warming
Which of the below can be classified as fossil fuels

Image: A photograph of a power plant with several tall smokestacks emitting smoke against a blue sky.

Options:

- Uranium
- Natural gases
- Coal
- Charcoal
- Bio-fuel
- Oil

Buttons: Continue

Software systems

The screenshot shows a software interface with a sidebar on the left and a main content area on the right.

Left Sidebar:

- A small alien head icon at the top.
- The word "admin" centered below it.
- The number "6" below "admin".
- A "Timer : 28" label.
- Two buttons: "Help" and "Restart".

Main Content Area:

Text: Fossil fuels are largely to blame for global warming
Which of the below can be classified as fossil fuels

Image: A photograph of a power plant with several tall smokestacks emitting smoke against a blue sky.

List of Options:

- Uranium
- Coal
- Bio-fuel
- Natural gases
- Charcoal
- Oil

Buttons: "Please select 3 answers" and "Continue".

This screenshot shows the same software interface as the first one, but with a different set of selected options.

Left Sidebar:

- A small alien head icon at the top.
- The word "admin" centered below it.
- The number "6" below "admin".
- A "Timer : 39" label.
- Two buttons: "Help" and "Restart".

Main Content Area:

Text: Fossil fuels are largely to blame for global warming
Which of the below can be classified as fossil fuels

Image: A photograph of a power plant with several tall smokestacks emitting smoke against a blue sky.

List of Options:

- Uranium
- Coal
- Bio-fuel
- Natural gases
- Charcoal
- Oil

Buttons: "Continue".

Test 13) Beginner Question [7]

Select the correct answers below

What is the name of Saturn's largest moon?

Titan
Olympus
Neptune

What solar system is the Earth located within?

The Terrasystem
The Helios
The milkyway

What is the name of the force that holds us to the Earth?

Magnets
The atmosphere
gravity

Timer : 2

Help

Restart

Continue

13a) Correct Answers

Select the correct answers below

What is the name of Saturn's largest moon?

Titan
 Olympus
 Neptune

What solar system is the Earth located within?

The Terrasystem
 The Helios
 The milkyway

What is the name of the force that holds us to the Earth?

Magnets
 The atmosphere
 gravity

Timer : 2

Help

Restart

Continue

13b) Incorrect Answers

The screenshot displays three windows from a software application:

- Left Sidebar:** Shows a user profile icon (a black alien head), the name "admin", a score of "-3", and a timer display showing "0 : 1 minutes 14 Seconds". Below the timer are "Help" and "Restart" buttons.
- Main Window:** A question window titled "Select the correct answers below". It contains three questions with dropdown menus:
 - "What is the name of Saturn's largest moon?" with options: Titan, Olympus, Neptune (the last one is selected).
 - "What solar system is the Earth located within?" with options: The Tellusystem, The Helios, The milkyway (the first one is selected).
 - "What is the name of the force that holds us to the Earth?" with options: Magnet, The atmosphere, gravity (the second one is selected).
- Bottom Timer Window:** Shows a timer display with "Timer : 7 minutes 25 Seconds" and "Help" and "Restart" buttons.

Intermediate Questions

Test 14) Intermediate question [1]

admin
0
Timer : 0 minutes 4 Seconds
Help
Restart

What is the name of the star located at the centre of our solar system?

Sol Kastrra
Mira Capella

14a) Correct Answer

admin
1
Timer : 28 minutes 8 Seconds
Help
Restart

What is the name of the star located at the centre of our solar system?

Sol Kastrra
Mira Capella

14b) Incorrect Answers

The screenshot shows a software interface for a quiz or game. On the right side, a large window displays a question and four answer choices. The question is: "What is the name of the star located at the centre of our solar system?". The four options are "Sol", "Kastra", "Mira", and "Capella". The option "Sol" is highlighted with a blue border, indicating it is the correct answer. On the left side, there is a sidebar with the following information:

- User: admin
- Score: 0
- Time: 0 minutes 4 Seconds
- Buttons: Help, Restart
- Timer: 0 minutes 2 Seconds
- Buttons: Help, Restart

Test 15) Intermediate Question [2]

The screenshot shows a software interface with a dark background. On the left, there is a sidebar with a user icon, the name "admin", a score of "0", and a timer section. The timer is set to "0 minutes 1 Seconds". Below the timer are two buttons: "Help" and "Restart". On the right, the main area contains a question titled "Choose the answers that complete the sentences." It asks: "Space is a [] This means that there is no [] in space." Below this, it says: "Due to these circumstances [] cannot travel through space." There are four options in each set of brackets: Sink, Vacuum, Mop (for the first set); and Nitrogen, Water molecules, Oxygen (for the second set). Under the first set, "Vacuum" is highlighted in blue. Under the second set, "Oxygen" is highlighted in blue. At the bottom right is a "Continue" button.

15a) Correct Answers

This screenshot shows the same software interface after the correct answers have been selected. The sidebar now shows a score of "3". The timer has been updated to "1 minutes 32 Seconds". The "Vacuum" option under the first set of brackets and the "Oxygen" option under the second set are both highlighted in blue. The rest of the interface remains the same, including the question text and the "Continue" button at the bottom right.

15b) Incorrect Answers

The screenshot shows a software application window. On the left, there is a sidebar with a user icon, the name "admin", a score of "0", and a timer section showing "minutes" and "Seconds" with a progress bar. Below this, the timer is displayed as "Timer : 0 minutes 29 Seconds" and has "Help" and "Restart" buttons. The main area is titled "Choose the answers that complete the sentences." It contains two incomplete sentences with dropdown menus for answers. The first sentence is "Space is a [Sink, Vacuum, Wave] This means that there is no [Hydrogen, Oxygen, Nitrogen] in space." The second sentence is "Due to these circumstances [Sound, Heat, Light] cannot travel through space." A "Continue" button is located in the bottom right corner of the main area.

Test 16) Intermediate Question [3]

The screenshot shows a game interface titled "Global Warming". On the left, there's a sidebar with a user icon, the name "admin", a score of "0", and a timer showing "0 minutes 4 Seconds". Below the timer are "Help" and "Restart" buttons. The main area has a blue background with a planet Earth. It contains three text inputs for a quiz:

- "This is cause by the excessive burning of fuels"
- "These gases gather within our
- "This thickens it, meaning more is trapped, Increasing the temperature of the world"

A "Continue" button is located in the bottom right corner.

16a) Correct Answers

This screenshot shows the same game interface after the correct answers have been entered. The sidebar now shows a score of "3". The main area displays the correct responses:

- "This is cause by the excessive burning of fuels" (the input field shows "Coal")
- "These gases gather within our " (the input field shows "Atmosphere")
- "This thickens it, meaning more is trapped, Increasing the temperature of the world" (the input field shows "Heat")

The timer has increased to "1 minutes 40 Seconds". The "Help" and "Restart" buttons are still present, and a "Continue" button is in the bottom right.

16b) Incorrect Answers

The screenshot shows a game interface. On the left, there is a sidebar with a user profile picture, the name "admin", a score of "0", and a timer section showing "Timer : 0 minutes 57 Seconds". Below the timer are "Help" and "Restart" buttons. The main area is titled "Global Warming" and contains the following text:
This is cause by the excessive burning of fuels.
These gases gather within our
This thickens it, meaning more is trapped, Increasing the temperature of the world.

16c) Other options

The screenshot shows a game interface. On the left, there is a sidebar with a user profile picture, the name "admin", a score of "0", and a timer section showing "Timer : 35". Below the timer are "Help" and "Restart" buttons. The main area is titled "Global Warming" and contains the following text:
This is cause by the excessive burning of fuels.
These gases gather within our
This thickens it, meaning more is trapped, Increasing the temperature of the world.

Test 17) Intermediate Question [4]

The screenshot shows a software interface with a sidebar on the left and a main content area on the right.

Left Sidebar:

- User icon: A black alien head.
- User name: admin
- Score: 0
- Timer: Timer : 0 minutes 2 Seconds
- Buttons: Help, Restart

Main Content Area:

Which of the following statements are true?

Background image: A power plant with several tall smokestacks emitting smoke against a blue sky.

Statements (each with an input checkbox):

- Global warming is caused by increased Earth temperatures
- Global warming causes the ice caps to melt
- Bio-fuels are more environmental friendly fuels
- Nuclear waste can be used to speed plant growth
- Fossil fuels are good for the environment
- Spraying lots of aerosols slows the progress of global warming
- Cutting down trees helps the atmosphere
- Nuclear waste harms the environment

Buttons at the bottom:

- Please select 4 answers
- Continue

17a) Correct Answers

The screenshot shows the same software interface after the user has selected the correct answers.

Left Sidebar:

- User icon: A black alien head.
- User name: admin
- Score: 4
- Timer: Timer : 0 minutes 50 Seconds
- Buttons: Help, Restart

Main Content Area:

Which of the following statements are true?

Background image: A power plant with several tall smokestacks emitting smoke against a blue sky.

Statements (each with an input checkbox):

- Global warming is caused by increased Earth temperatures
- Global warming causes the ice caps to melt
- Bio-fuels are more environmental friendly fuels
- Nuclear waste can be used to speed plant growth
- Fossil fuels are good for the environment
- Spraying lots of aerosols slows the progress of global warming
- Cutting down trees helps the atmosphere
- Nuclear waste harms the environment

Buttons at the bottom:

- Continue

17b) Incorrect Answers

The screenshot shows a software application window. On the left, there is a sidebar with a user icon, the name "admin", a score of "0", and a timer section showing "0 seconds". Below the timer are "Help" and "Restart" buttons. The main area contains a question titled "Which of the following statements are true?". It features a background image of a power plant with smokestacks. The question has eight statements, each with a checkbox. The checked statements are: "Bio-fuels are more environmental friendly fuels", "Fossil fuels are good for the environment", and "Cutting down trees helps the atmosphere". The unchecked statements are: "Global warming is caused by increased Earth temperatures", "Global warming causes the ice caps to melt", "Nuclear waste can be used to speed plant growth", "Spraying lots of airsoles slows the progress of global warming", and "Nuclear waste harms the environment". A "Continue" button is located at the bottom right of the question area.

17c) Other options

The screenshot shows a software application window. On the left, there is a sidebar with a user icon, the name "admin", a score of "1", and a timer section showing "130 seconds". Below the timer are "Help" and "Restart" buttons. The main area contains a question titled "Which of the following statements are true?". It features a background image of a power plant with smokestacks. The question has eight statements, each with a checkbox. The checked statements are: "Bio-fuels are more environmental friendly fuels", "Fossil fuels are good for the environment", and "Cutting down trees helps the atmosphere". The unchecked statements are: "Global warming is caused by increased Earth temperatures", "Global warming causes the ice caps to melt", "Nuclear waste can be used to speed plant growth", "Spraying lots of airsoles slows the progress of global warming", and "Nuclear waste harms the environment". A "Continue" button is located at the bottom right of the question area.


admin
1
Timer : 152

Which of the following statements are true?

<input type="checkbox"/> Global warming is caused by increased Earth temperatures	<input type="checkbox"/> Global warming causes the ice caps to melt
<input type="checkbox"/> Bio-fuels are more environmental friendly fuels	<input type="checkbox"/> Nuclear waste can be used to speed plant growth
<input checked="" type="checkbox"/> Fossil fuels are good for the environment	<input checked="" type="checkbox"/> Spraying lots of aerosols slows the progress of global warming
<input checked="" type="checkbox"/> Cutting down trees helps the atmosphere	<input checked="" type="checkbox"/> Nuclear waste harms the environment

Continue


admin
1
Timer : 162

Which of the following statements are true?

<input checked="" type="checkbox"/> Global warming is caused by increased Earth temperatures	<input checked="" type="checkbox"/> Global warming causes the ice caps to melt
<input checked="" type="checkbox"/> Bio-fuels are more environmental friendly fuels	<input checked="" type="checkbox"/> Nuclear waste can be used to speed plant growth
<input checked="" type="checkbox"/> Fossil fuels are good for the environment	<input checked="" type="checkbox"/> Spraying lots of aerosols slows the progress of global warming
<input checked="" type="checkbox"/> Cutting down trees helps the atmosphere	<input checked="" type="checkbox"/> Nuclear waste harms the environment

Please select 4 answers **Continue**

Test 18) Intermediate Question [5]

Drag and drop the planets onto the correct white box

Confirm
Please drag all planets
Reset question

admin

0

Timer : 0 minutes
4 Seconds

Help

Restart

Jupiter

Mars

Neptune

Mercury

Pluto

Earth

Uranus

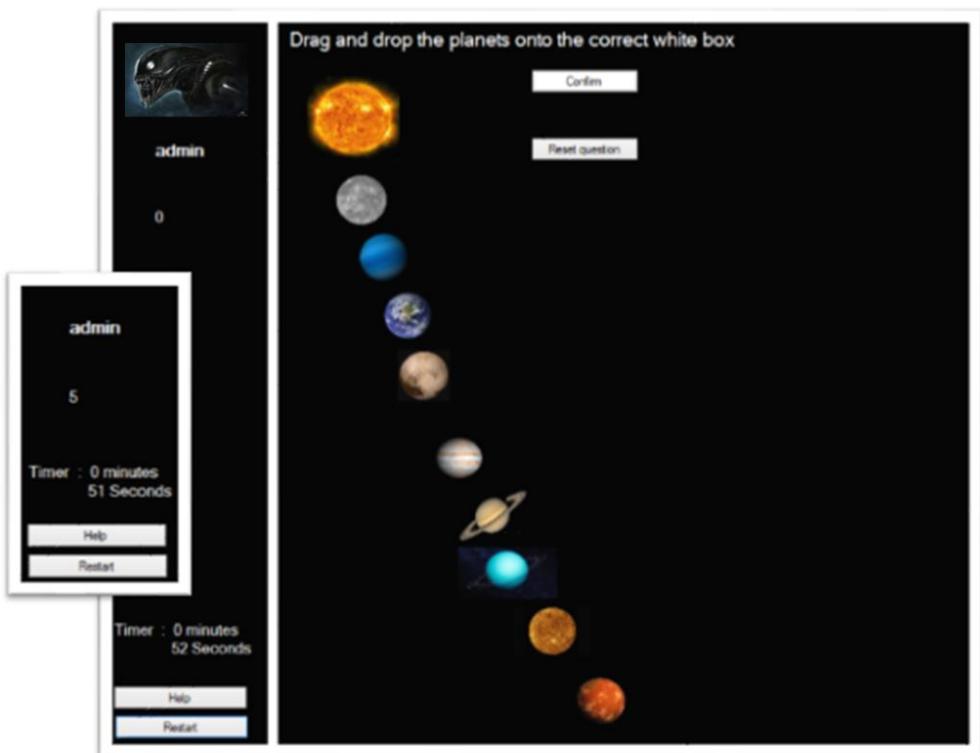
Venus

Saturn

18a) Correct Answers



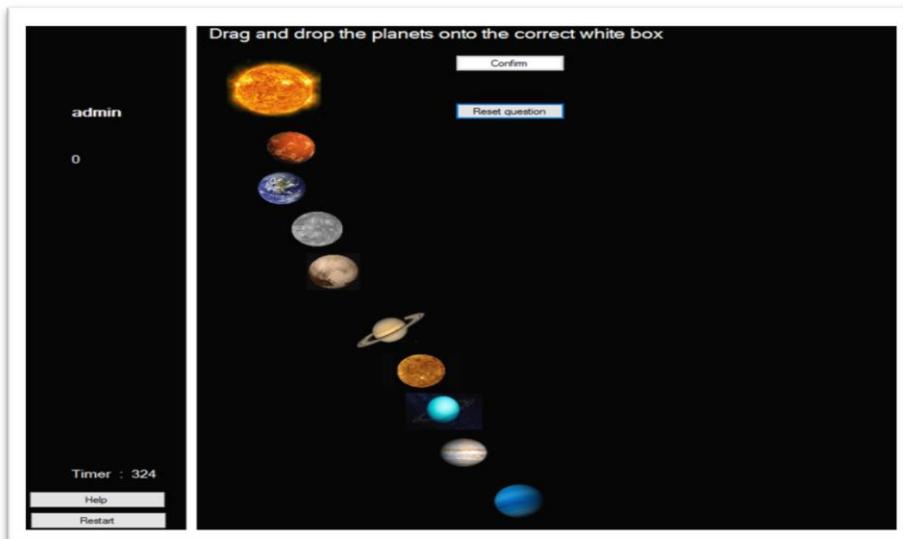
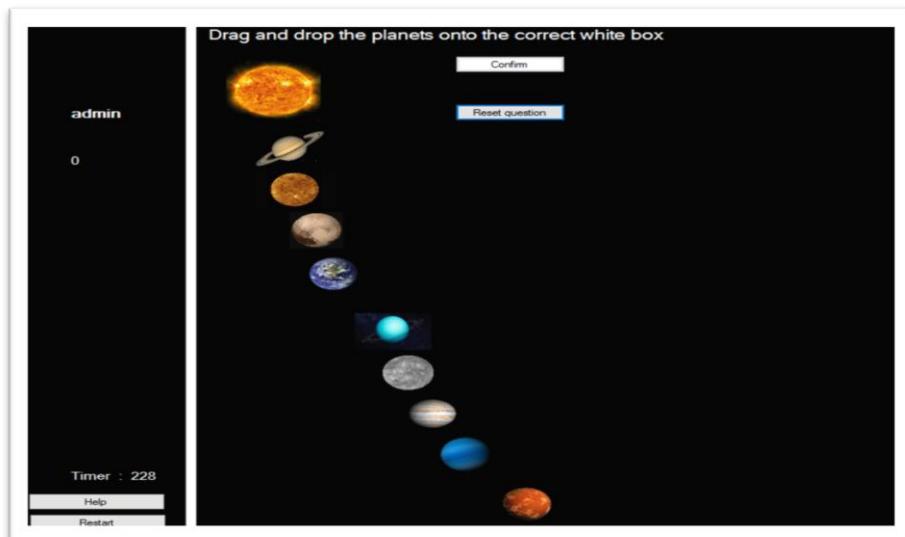
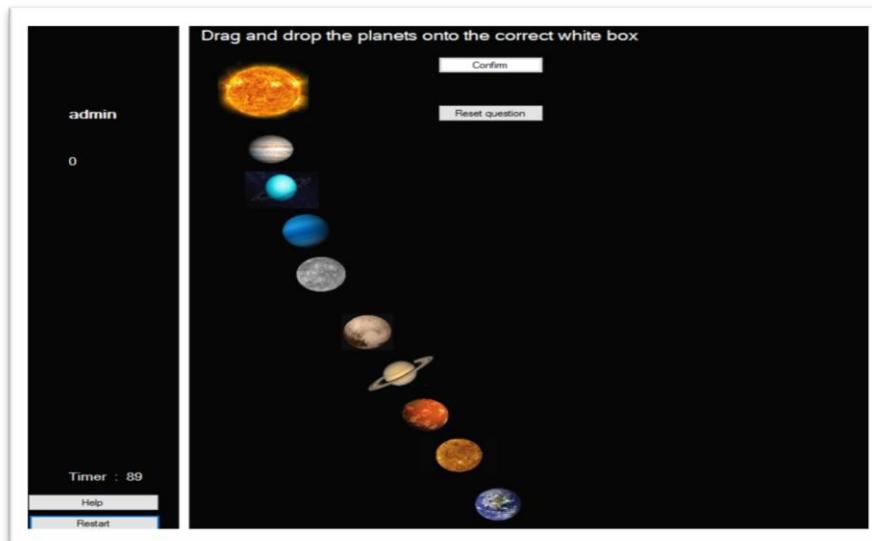
18b) Correct and Incorrect Answers



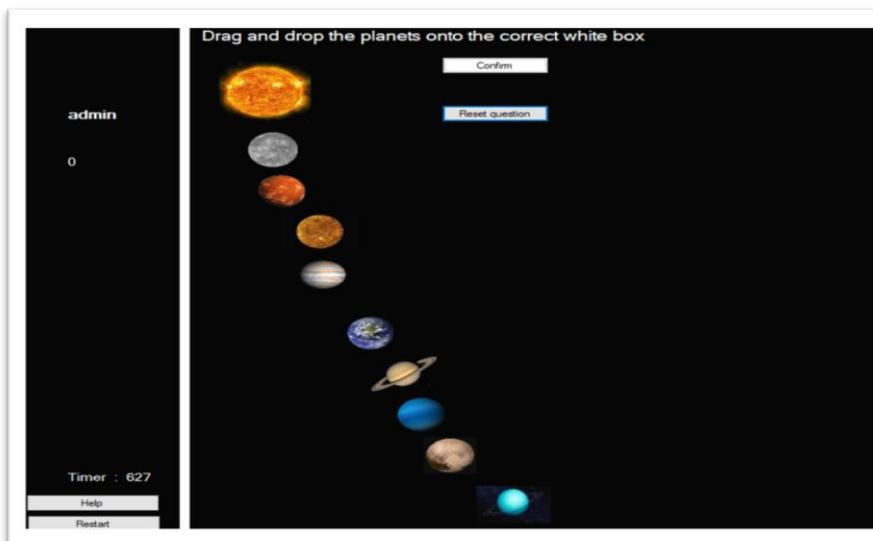
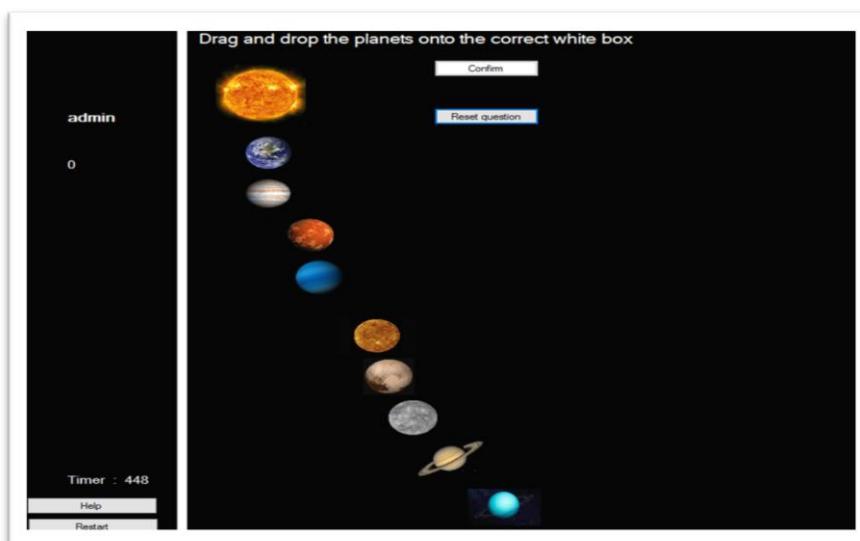
18c) Incorrect Answers



18d) Different drag options



Software systems



Test 19) Intermediate Question [6]

admin
0
Timer : 0 minutes 2 Seconds

Help
Restart

There is a term used to define the position of the planets in our solar system.
What are the name of the diagrams below?

Continue

19a) Correct Answers [Capitals]

admin
2
admin
0
Timer : 0 minutes 45 Seconds

Help
Restart

Timer : 1 minutes 15 Seconds

Help
Restart

There is a term used to define the position of the planets in our solar system.
What are the name of the diagrams below?

Geocentric
Heliocentric
Continue

19b) Correct Answers [No capital letters]

There is a term used to define the position of the planets in our solar system.
What are the name of the diagrams below?

Geocentric heliocentric

Continue

admin 0

rules
ounds

admin 2

Timer : 0 minutes
23 Seconds

Help
Restart

19c) Incorrect Answers

There is a term used to define the position of the planets in our solar system.
What are the name of the diagrams below?

No Our

Continue

admin 0

rules
ounds

admin -2

Timer : 0 minutes
30 Seconds

Help
Restart

Test 20) Intermediate Question [7]

On a clear day on June, John noticed that his shadow was pointing in a westernly direction, what time of day do you think it is?

Midday

Morning

early evening

midafternoon

admin

0

Timer : 0 minutes
0 Seconds

Help

Restart

20a) Correct Answer

On a clear day on June, John noticed that his shadow was pointing in a westernly direction, what time of day do you think it is?

Midday

Morning

early evening

midafternoon

admin

0

minutes
Seconds

1

Timer : 1 minutes
37 Seconds

Help

Restart

20b) Incorrect Answers

The image shows a software interface with a question card and a timer window.

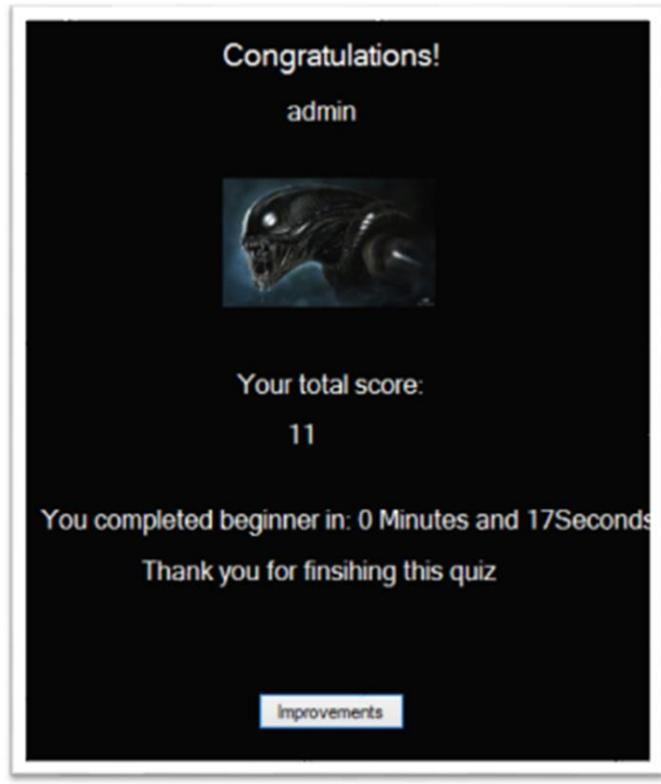
Question Card:

- Top left: A small icon of a person's head.
- Top right: Text: "On a clear day on June, John noticed that his shadow was pointing in a westerly direction, what time of day do you think it is?"
- Below the question: Four options in boxes: "Midday", "Morning", "early evening", and "midafternoon".
- Left side of the card: Displays user information: "admin" and "0".

Timer Window:

- Top left: Shows a progress bar with segments labeled "minutes" and "seconds".
- Text: "admin" and "-1".
- Bottom: Text: "Timer : 0 minutes 18 Seconds".
- Buttons: "Help" and "Restart".

Test 21) End Screen



Test 22) Improvements Screen

Tess 22a) Beginner, correct and incorrect answers

Number of planets - Correct
congratulations you answered correctly.
There are 9 planets present within our solar system (including pluto)

True and False - Correct
You answered this question perfectly!

Planet Drag and Drop - Incorrect
it seems that you did not align the planets correctly.
Please revise the order of the planets, and try again.

Direction of sun rise - Incorrect
You said that the sun rises from the west, however it rises from the east.

Fossil Fuels - Correct
You were able to identify all of the fossil fuels, congratulations

Exit

Software systems

Test 22b) Beginner, All correct Answers

Number of planets - Correct
congratulations you answered correctly.
There are 9 planets present within our solar system (including pluto)

True and False - Correct
You answered this question perfectly!

Planet Drag and Drop - Correct
You were able to drag the planets into the correct order!
Congratulations, you know our solar system.

Why the sun is at the centre of the solar system - Correct
You answered this question correctly

Direction of sun rise - Correct
Congratulations, the sun rises from the east.

Exit

Test 22c) Beginner, All Incorrect Answers

Number of planets - Incorrect
Sorry the answer which you provide was incorrect.
Please revise this topic, and try again.

True and False - Incorrect
You seem to have not answered this question perfectly.
Please revise some more on this question, and try again.

Fossil Fuels - Incorrect
It would seem that you did not identify all of the fossil fuels
Please revise some more on this question, and try again.

Planet Drag and Drop - Incorrect
it seems that you did not align the planets correctly.
Please revise the order of the planets, and try again.

Why the sun is at the centre of the solar system - Incorrect
You did not select the correct answer
Please revise this topic and try again.

Exit

Test 22d) Other outcome

Number of planets - Correct
congratulations you answered correctly.
There are 9 planets present within our solar system (including pluto)

Direction of sun rise - Incorrect
You said that the sun rises from the west, however it rises from the east.

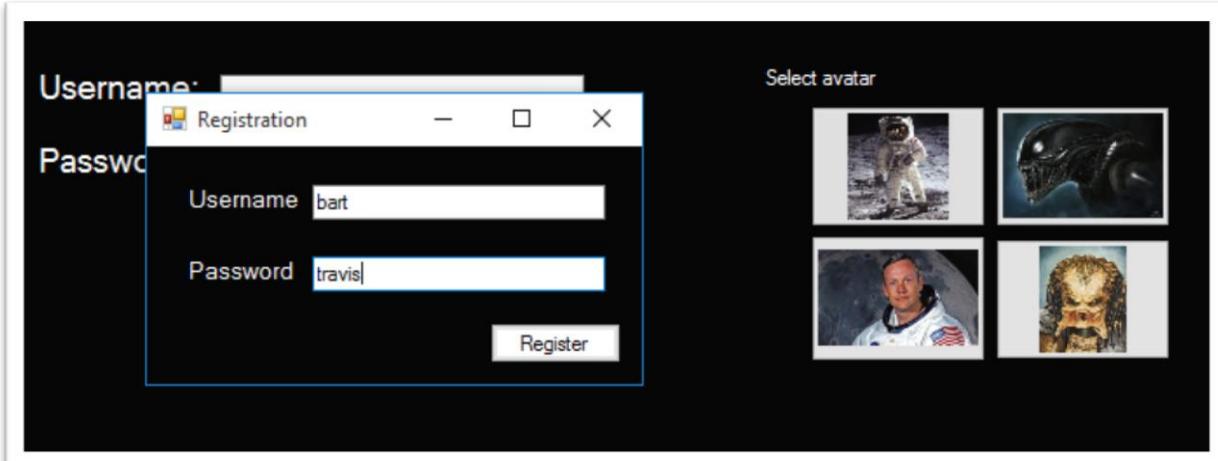
Fossil Fuels - Incorrect
It would seem that you did not identify all of the fossil fuels
Please revise some more on this question, and try again.

Planet Drag and Drop - Incorrect
it seems that you did not align the planets correctly.
Please revise the order of the planets, and try again.

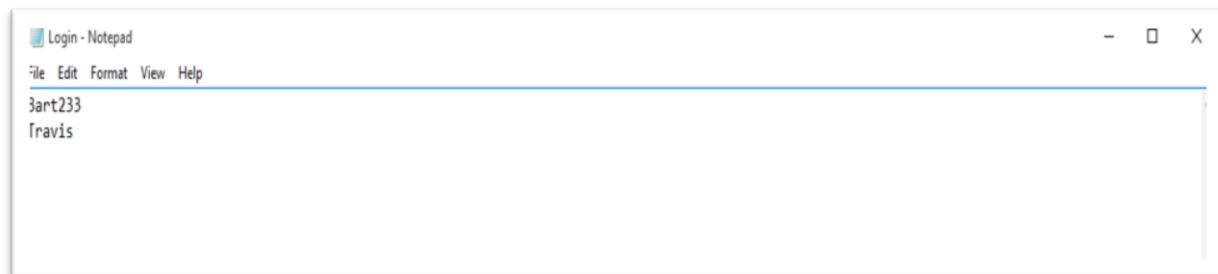
Why the sun is at the centre of the solar system - Incorrect
You did not select the correct answer
Please revise this topic and try again.

Exit

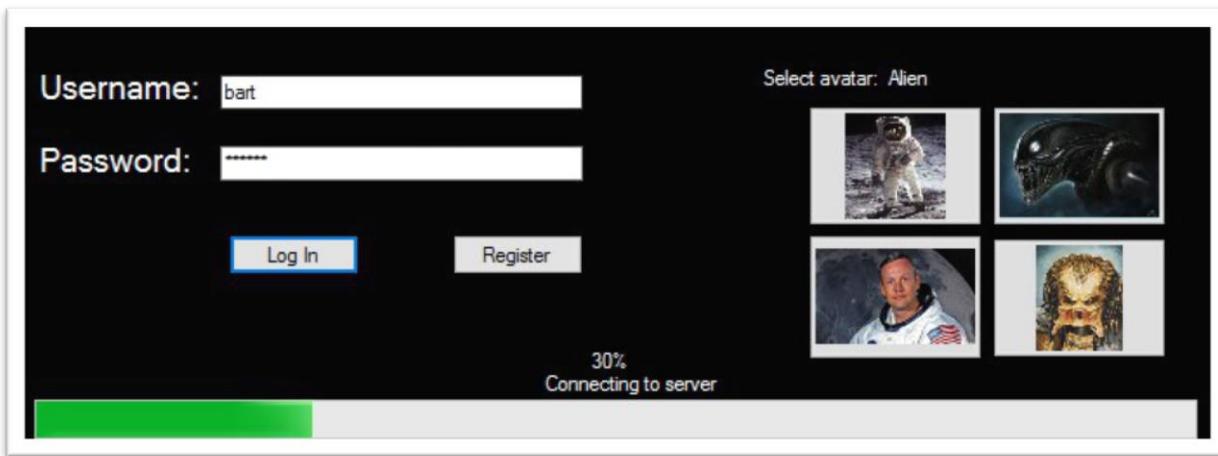
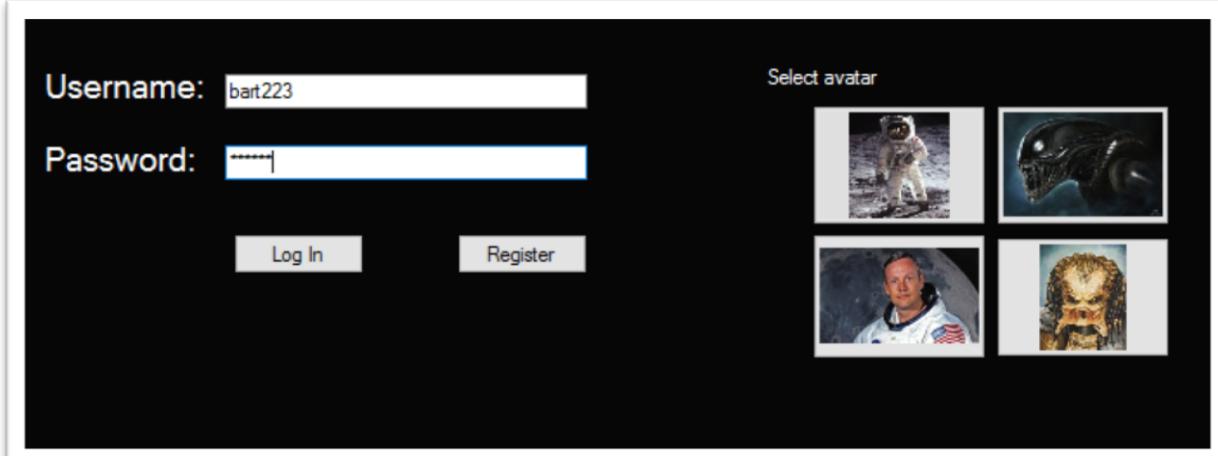
*Test 23) Login from File
Test 23a) entering new login details*



Test 23a) Notepad view



Test 23b) Logging in with new details



Evaluation

Evaluation

For this assignment, I was provided the task of creating a visually appealing education quiz, using various functions, providing the user with various ways in which they could interact with it. To complete this assignment, we were informed that we had to create the quiz using C# coding. To help make the overall process easier, I chose to use Microsoft's visual studio program, due to the fact that it was created for specific purposes much like this one, meaning that it provides the user with the ability to create various items using numerous different coding languages. It also comes equipped with various functions and operations which help improve the overall quality of my quiz.

As mentioned before within this assignment, I started creating this quiz, due to the fact that one of my science teachers within North Coast Integrate College informed me that they were having issues getting some of their students sitting down and revising important notes needed for this section of the science exams. She then asked me if it would be possible to create something interactive to help them learn the specific points about space and the world around us.

This is important to note due to the fact that this meant that I had to base all of my decisions and designs around her requirements. While some of the design choices were chosen by me, my teacher provided a rough idea of what they wanted. When I was completed these designs and various questions, I had to run them past her to ensure that they met her requirements.

In regards to the visual aspects of this quiz, I made the decision to display various images related to the corresponding questions, to add colour and variety throughout the quiz. Visual studio made the process of adding various images into my quiz very easy, with the use of picture boxes. All I had to do was place and resize a picture box, before entering an image. This image would then be saved within a resource folder in the program, making it easy to access and reuse. On top of this, it is worth mentioning that most all of the components which could be used within this program are customizable, in regards to their size, position and colour, which provides the user with the ability to be very creative.

This program provided numerous benefits, due to the fact that it comes preloaded with various operations and tools which help simplify the process of coding. One of the largest benefits is that the program comes with a separate screen which can be accessed for every form created, where the user stores the various pieces of code which they use. This is also beneficial because any time the user adds a new component to their form; it is automatically added to this second screen, making coding that much easier.

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User requirements

Earlier within this assignment my teacher and I set various user requirements for the quiz which I have created. I now want to assess whether or not I have completed them.

- The purpose, for which I am making this game, is to provide students with an entertaining and fun way of revising space and the Earth around us for science.

When thinking up the various questions which I used within the quiz, this was one of the requirements which I kept in mind. I tried to ensure that the questions were both educational, yet entertaining to help ensure that the user did not get bored. A few silly yet decent examples of this are present within ()

- I have decided that I am going to make the quiz focus around the topic of Space and Our environment; this means that I want to have the questions relate to the planets, theories and the environment.

Once again, this point relates to the creation process of the question. This one however was extremely important, due to the fact that the questions had to correspond to this subject. I believe that I did this very well, talking about the planets, space, the environment and the various things affecting the Earth.

- I have set a few simple guidelines for myself when I begin making the quiz, I am it to be;
 - User friendly,
 - Neatly laid out,
 - Somewhat challenging,
 - Visually appealing,
 - Interesting to complete,
 - A good revision tool.

While there are a lot of points present within this requirement, some of the main ones which I believe where done exceptional well, relates to the design, appearance and the fact that it is supposed to be a good revision tool. This is because I took a very long time to ensure that the visual aspect of the quiz was as close to perfect as I could possibly get it, in regards to the insertion of an interesting and relevant colour scheme and various images. On top of this, I put quite a lot of time into the creation of the various question within this quiz, ensuring that they were quite interesting and educational.

- I want the quiz to include several different graphics to help make the quiz look much more appealing, while also helping get specific points across.

As mentioned before, I made sure to include numerous images into my quiz, for the background, and also integrated into the question at times. This was important because they make the form look more interesting and can be used to get a specific point across.

- Due to the fact that I don't want this quiz to be repetitive and boring, I have decided that I will have to include several different questions, an example of what I want to include in the quiz is; Drag and Drop, multiple choice and drop-down.

I have made sure to include a variety of different question designs and schemes, done with the use of various components ranging from; text boxes, drag and drop, check boxes and list boxes. I made sure to do this because the variety of question types makes the quiz much more entertaining and interesting to complete.

- Another important feature which I feel is necessary to add is a help feature, I want users to be able to access this from anywhere within the quiz, and also want it to contain helpful information.

To meet this requirement I created an extra form which contained information about the various questions which I have included in my quiz. I wanted this form to be easy to access, which is why I have included a button within all of the other forms, which the user can click to open the form.

- To make the quiz seem more interactive, I have decided that I am going to include a login system where users can enter their own names. On top of this, I also want to include a character system, where users can select from a list of character images, which will then be displayed throughout the quiz.

While the login system which I have created is not extremely high tech, it lets the user login using their own details, presenting their username throughout the quiz. This is important because it lets the user connect with the quiz more.

- It has also been brought to my attention that it might be beneficial to add two different difficulty settings so that users can answer easier questions to begin with. In doing this I believe that I will likely use similar questions, however the beginner section will likely contain more drag and drop, or multiple choice questions.

I designed the quiz so that it has two different difficulties, beginner and intermediate. To do this I created two different question banks both of which containing seven questions, making the intermediate ones harder for the most part. This was to let students wanting more of a challenge have access to one.

- One of the final features which I believe would work nicely within this quiz is a character score and timer. This would help make the quiz somewhat more competitive, which could possibly encourage users to try harder each time they complete the quiz.

Within the quiz I have set up a feature where the players score and points are displayed across the entirety of the quiz. I have also updated both numerous times to make the function more effectively and also because they might have broken from time to time.

Strengths

As may have been made evident by the rest of the document, I am most proud of my design choices within this quiz. This is because I believe that the use of colours and images help make the quiz much more interesting and attractive. On top of this I am also very proud of the overall layout of the forms, in regards to the questions and also the user display. This is because I believe that it is all beneficial at making information easier to see, and also more professional looking.

One other feature which I am very happy with inside of this quiz, relates to the overall functionality of it. This is because I went into this subject with no knowledge about coding, and was extremely satisfied every time I was able to actually make something work. While the coding which I use may not be the most efficient, I am very happy with what I have done. One of the features which I am most excited about was the drag and drop, and also randomised form selection, due to the fact that I was informed about how difficult it would be to install these features, and have them working.

One other strength which is worth looking at, relates to the user requirements. This is because I followed these fairly well within my opinion, and believe that the quiz has benefited due to it, making it much more effective at completing its intended purpose.

Weaknesses

One of the main weaknesses which I would believe are worth mentioning is that I went into this subject with very little knowledge about coding, and visual studio. This meant that I had to spend a good majority of the first month working through both, getting an understanding of various pieces of code and operations.

One other weakness which seems worth mentioning, relates to the actual questions within the quiz. This is important to note, due to the fact that a lot of the questions which I used were not created with the most in-depth thought process, due to the fact that I am not good at making question. This is because I am always too paranoid that I am going to make the questions either too hard or too easy.

Limitations

There were quite a few limitations which I ran into within this unit, with one of the main being that there have been numerous occasions now where I have been unable to use Microsoft's visual studio, either because it is consistently crashing, or because I have been locked out due to the account I was using becoming inactive.

One of the other limitations which I ran into fairly early on, related to the fact that I had little to no idea what I was doing. Noticeable within a few of my earlier attempts at making this quiz, the resource folder can be very bad when you don't know how it works. With my first quiz, something corrupted within the resource folder, which then caused everything else to error within the folder, meaning that the entire quiz was error. While I know now that there is an easy way to try and fix this process, at the time I tried fixing it and broke everything.

Improvements

I had a lot of fun creating this quiz, yet I have concluded that there were a few things which I would have liked to do differently. One example of this isn't really a feature of the game, as it relates more to me and my skills. Earlier I mentioned that when I was making this quiz, I had little to no experience with C# and the program, so I believe that it may have affected the overall quality of my quiz. I believe that if I were to create another quiz or other such program, that I would definitely be able to make better features overall.

In regards to making another quiz, I would definitely want to spend more time looking into better questions, because even though I believe that the ones which I have used are decently good and work, I believe that there are likely better ones which I could have used.

Appendices

Appendix 1 – Quiz Diary

Quiz diary

September 7th September

Today my science teacher asked me if I could help them by creating an education quiz, related to the subject of science. My teacher mentioned that the subject they were currently reviewing was space, a favourite of mine, which is why I have decided to make the quiz about space and the world around us.

September 10th September

I spent a considerable amount of time today, messing with visual studio and getting an understanding of how it works. While it has been a bit confusing upon first sight, I have had a friend helping me learn the basics.

September 13th September

I started the splash screen for the quiz today, and have finished most of the functionality of the form, including the loading bar, images and loading text. Even though it's fairly simple, I am very happy with the way this form has turned out. I am still currently working on the style of my quiz.

I have also began working on the functionality of the login screen, and was able to set up a system where the text boxes recognise a set username and password, which would then start loading the next form. However as of now, there are only these two forms.

Thursday 17th September

completed the login screen today, and have been thinking about the possibilities of adding character selection to the quiz. I have the character placeholder images in the quiz, however I am not completely sure what would be the easiest way to set the selection screen up.

Monday 21st September

I started working on the 1st question of the quiz, yet I am having a few problems thinking of questions which I can add, which are both interesting and not to easy or hard.

Other than this though, I also got the character selection working. I found that the easiest way for me to set this up, was to create a global variable that starts at 0, and each different image will change the variable to a number between 1 and 4. Later in the quiz, in the questions I can then reference this variable, and depending on the number the corresponding image will show up.

I ran into a slight issue when messing with this function, as first the resource folder started eroding, causing errors all across the game. The first time that this happened I simply restarted because it messed everything up, however I was able to find that there was an unidentified image within the resource folder, causing the errors.

Wednesday 23rd September

Finished question 1 and I have also set up another global variable to count the players score, and have set it up so that when correct answers are selected, the variable will increase accordingly. I have also updated the display so that the username and score show up underneath the character's image.

I also spend some time today messing with the overall design of question 1, and I think I have found a design which I really like; a black background with white text.

Monday 28th September

Today I completed question 2, including the background which I have kept consistent with the last question. I think that the design goes with the space theme, and gives the quiz a nice look. For this question though, I was looking through the components bar and found list boxes and decided to use them for this question.

While I like the question, I have to admit that it was a pain to try and get the question working, because I had to set it up so that a Boolean will change depending on the answer which has been selected, so that if the correct answer is selected, it will equal true and points can be added when they press continue.

Friday 2nd October

I finished question 3 today, wanting to ensure that the questions don't all seem the same, I made this one with a text box, meaning that users have to type in the missing work. To try and make it a little easier, I have made it so that the boxes start with the correct first letter.

Friday 9th October

Today I completed question 4, I made it a multiple choice where the user has to select 4 of the correct answers by using check boxes. On top of this, I was researching more into the drag and drop procedures, and I believe I finally found out how to get it working. I tested it on a simple text box, label and image, and to my surprise it worked. I am extremely excited to add this to my quiz, because it would make a very nice addition to the functions I already have, and also because I have been told that it is very hard to do.

Friday 16th October

After a lot of time and effort, I believe that I have actually finished the drag and drop for the planet drag and drop questions. I'll admit that I ran into several issues when I was working on this question, the main one being that I found out how to drag text, however not images. Eventually I found that it was because I had to tell the system that the file being dragged was a bitmap, and not text fixing that issue. The issue that I am having now is that the overall point system doesn't seem to be working, where some dragged images will provide points, while others won't.

Today my teacher gave me a suggestion of splitting the quiz into two different sections of beginner and intermediate, which I thought was a fantastic idea because it helps widen the audience which the

quiz can attract, while also expanding the quiz altogether. I am going to do this as soon as I finish the 7 questions for this section, which will be intermediate.

Monday 19th October – Friday 23rd October

Over this week I have been spending time finishing up the final two questions for the intermediate section of the quiz, making a text box question and a multiple choice one. On top of this I have also started working on the beginner section of the quiz. I have decided that I want this section of the quiz to be similar yet easier and more interactive.

Friday 23rd October – Monday 2nd November

I have added quite a lot to the quiz over this time, the main things being that I have completed the rest of the questions for the beginner section of the quiz, having used similar questions for the most part, yet different. I believe that these questions are much better due to the fact that the intermediate were basically just me testing the software, and because I feel much more confident in what I am doing now.

There were also several changes which I made, the most basic one being that I have added a global timer to the quiz, which

- I added a timer that counts up throughout the quiz.
- A registration form that allows users to display their own name throughout the form, and allows them to use their own passwords.
- An improvements screen, which was a pain to complete due to the fact that I had to go back through all of the forms and set it up several variables that would change if all of the answers were correct, otherwise this screen would display a message telling the user what they have to improve upon.
- Along with a few other small tweaks and fixes.

Monday 2nd November – Friday 6th November

I have randomised the process of opening forms, changing it so that a total of 5 forms opens before the quiz ends, and so that every time the user finishes a form it will either select a random one from the seven that I have created or take them to the end screen. On top of this I put in the effort to ensure that the same form would not be selected twice.

Friday 9th November – Friday 13th November

When doing some testing for the quiz, I realised that the scoring system for the drag and drop questions was not working correctly. It took a while for me to establish what exactly was causing the issue due to the fact that all of the coding should have been working. Yet I was able to establish that the issue was that the images being dragged were not registering within the system, due to the fact that I had made a small mistake, where instead of the drag image equalling the correct image as correct, I was comparing the background image.

Friday 13th November – Tuesday 17th November

When doing the testing again, I found another issue with the drag and drop, it being that even though the quiz would not continue if not all of the images had been dragged, it would still add score if at least one of the images were placed correctly. This resulted in an incident where users could just keep pressing the button over and over again to get score within the hundreds. To fix this I had to set up a system where the game would not score the player until all images had been dragged, resolving the issue.

Friday 20th November – 3rd December

Today my teacher gave me a recommendation of changing up the planet drag and drop planets. Currently I have it so that if the user wanted to, all of the drag slots could be filled with earths. While it took a fair bit of time, effort and a lot of repetition I finally updated it. Now when a user drags an image, it will adjust size to look natural and will also make the drag image disappear, and disable dragging for the filled box.

Friday 4th – 7th December

Having changed the format of the planet – drag and drop question, I have made the decision to modify the true and false drag questions. I did this because I believe that it makes the question seem and look much more professional and effective. On top of this it also stops users from dragging four of the same answers, and getting all the points accordingly.

Tuesday 8th December

Today I took time to update the timer within my quiz to convert seconds into minutes and display both on the forms. This is because I believe that it makes the information much easier to read and helps to make the questions look much more professionally made, in my personal opinion.

Thursday 7th January 2016

For a while now I have been working on the testing process for the game, taking several screenshots and filling out a table. However I have just thought about adjusting some features in the quiz, where users lose points if they select the wrong answer.

Friday 8th – 14th January

Having finished taking all of the evidence screenshots of the various things within my quiz, I decided to move on to the testing table. This is important because it displays the tests which I have conducted, why I conducted them and what I did to fix any issues.

Tuesday 19th – 22nd January

Over this span of time I have been finalising some of my testing and my final designs. To make these designs, I chose to use Microsoft's word program and decided to use a variety of boxes and shapes to make something similar to my final designs.

Friday 22nd January – 28th January

There were still various documents and such which I had to update and complete to finalise this unit, which is what I have been spending this time. An example of a few documents which I have been finishing is the GRANTT chart, and evaluation.

March 28th – April 12th

I recently acquired a short report regarding my course work, and have spent some time reviewing my quiz and the coding within it. Looking over a lot of the coding now, I have discovered that it is generally messy and ineffective, with some even being unnecessary. I have decided to go through the entire quiz, and attempt to fix and replace a lot of the code which I have used, and to incorporate some of the new techniques I have recently learned, such as switches and loops.

Character system

The first modification which I made related to the code which was used to get the character variable and display the appropriate image. I figured that it would be more beneficial to incorporate a switch system, and use it to complete this task instead. This worked as expected and I can say that it looks much cleaner and organised; however I am not sure if it is more effective.

Quiz Reset

Another large change I made related to the variables used within the quiz. This is because I went through, and whenever I found a long list of variables such as an answer system I changed them into arrays. This had several benefits in the sense that it made the code much cleaner, and because it made it easier for me to get the reset buttons working. This was because I was able to incorporate two loops, which would easily sort through important arrays resetting them all to their default values.

Loading of new form

Other than simplifying pieces of code to make them more effective and cleaner looking, I also made it so that the timers where more organised and contain all relevant pieces of code. I also made the decision to modify the block of code which I was using to load a new form. Initially I was using a long series of IF statements which would look at all of the possible outcomes for a random variable. I have decided to change this slightly using fewer IF statements, and connecting them as a Nested IF Statement. I have also made the decision to place this within a Do loop, as this means that the system will continuously select random numbers until it selects one which has not been used yet. Once this happens the new form will load, and the loop will end.

12th April – 15th April

Recently I have been spending time finalising all of the forms, making them much cleaner than they were. Along with this there were also a few very large changes which I made, such as;

Improvements Screen

I finally went back to finish the improvements screen, which I left a long time ago due to the system being unable to correctly identify the questions which the user answered. Now that I have gone through all of the forms, I was able to place all of the code I needed for this.

Initially however, I had the idea that I would have only 5 labels, so when the user completed the quiz, the program would check to see which questions were answered, then check to see if they

were correct. While this may have worked, I soon realised that I would also need some counter measures to ensure that the same questions text wouldn't get posted several times. On top of this, I also had to make sure that two or more questions wouldn't fight to place their text into the same label.

After a long time of messing with the code, I decided that it would be more beneficial to simply add 2 more labels and assign each question a specific label. This means that I merely needed a few if statements to make this work.

Text File

Something else worth noting refers to the loading of questions. Currently the quiz will end after the user has answered a total of five questions, while this works perfectly I was contemplating the act of implementing a leader board into the quiz. I concluded however that the issue I would have with this is that each question provides a different score total, and each question is randomly chosen. This means that some users may have a lower score, simply because they had different questions instead of reflecting their answers.

I attempted to modify the block of code which I have been using to generate and load new forms; however for an unknown reason changing the max number of forms to 7 caused it to crash after the 6th question was answered. I even removed the loop from the block of code, and tested a variety of different ideas. I decided that I would leave the loop out due to the fact that it was already within a timer, making the loop counter-productive.

I decided that Instead of implementing a leader board, I would try and make it remember the login details. Having never worked with the process of accessing a file through c#, this turned out to be quite difficult. After researching the process somewhat online and attempting it, I ran into issues where the program was either unable to access the file, or stated that it did not have authorisation. I believe that these issues arose because I entered a file path which was slightly incorrect.

Eventually I was able to get the code to work, where it would write the user's username and password to the text file. The next block of code which I had to create would read the text from the file and compare it against that the user enters. This piece of code was quite short, and was not nearly as difficult to establish.

Appendix 2 – Teacher Questionnaire (User requirements)

Teacher Questionnaire

Science Quiz -User Requirements-

Please answer the various questions below to help me establish a few guidelines to ensure that the quiz meets your expectations.

Basics

What should the topic of the quiz be? Science and the world around us

How many questions should there be? 14

What is the targeted audience for this quiz?

I want to use this quiz to help my year 9 science students revise this topic.

Questions

Below are some questions which I have thought up, tick any which you would like to be present within the quiz.

- State how many planets are in our solar system?
- What is global warming?
- What is gravity?
- What is a fossil fuel?
- Which of the following statements are true?

Are there any other questions which I should add?

In general try to relate the questions to the solar system, the planets, or specifically the earth's environment.

Functionality

How should the user be able to answer the questions?

- Using textboxes
- Using check boxes
- Multiple choices
- Other?

- Drag and drop if possible.

There are various functions which could be useful within this quiz, is there anything in specific which you would like?

I want this quiz to be very interactive and to involve the user when possible. It would be nice if the students could create and use personalised profiles, with usernames and character images of your choice. I would also like a score system of some kind and a timer to track the users progress throughout the quiz.

Design

In regards to the design, do you have a preferred colour scheme?

Yes No

I simply want something attractive and interesting. Please try to use a variety of images and designs which fit this description.

I want to use various images within this quiz, are there any particular types of graphics you want?

As long as the images are relevant to both the quiz and the questions being used, I don't mind which graphics you use.

Any final notes?

Please try your best to make the quiz educational and fun. I want this to benefit my students with these topics as much as possible.

Appendix 3 - User Questionnaires

User Questionnaire [1]

Science Quiz Space and the World around us |Survey|

For this survey, I would like to ask you a few questions relating to your thoughts about the educational science quiz which I have created.

What did you think about the experience you had using the quiz?

Educational

Did you run into any issues when using this quiz?
(Quiz crashed or items not displaying correctly)

YES

No

If yes, please detail any issues below:

How beneficial was this quiz for you, were the
questions educational?

(If yes, please rate out of 1 -10)

YES

No

- 1 2 3 4 5 6 7 8 9 10

How well presented was the quiz?

- Very well presented Decently good Needs improvements

Other:

What Did you like and dislike about the presentation of this quiz?

I really liked the overall layout of the quiz.

I wanted this quiz to have varying difficulties, but how difficult where they on a scale of 1-10?

Beginner:

- 1 2 3 4 5 6 7 8 9 10

Intermediate:

- 1 2 3 4 5 6 7 8 9 10

Did you like the questions, If no, could you think of any improvements?

YES No

If you have any other suggestions, please feel free to note them down here.

Thank you for taking the time to fill out this form, and complete the quiz. Your feedback will be reviewed as soon as possible.

User Questionnaire [2]

Science Quiz Space and the World around us |Survey|

For this survey, I would like to ask you a few questions relating to your thoughts about the educational science quiz which I have created.

I personally really enjoyed playing and completing this quiz.

Did you run into any issues when using this quiz?
(Quiz crashed or items not displaying correctly)

YES

No

If yes, please detail any issues below:

How beneficial was this quiz for you, were the
questions educational?

(If yes, please rate out of 1 -10)

YES

No

1 2 3 4 5 6 7 8 9 10

How well presented was the quiz?

Very well presented Decently good Needs improvements

Other:

What Did you like and dislike about the presentation of this quiz?

I was impressed with the variety of questions presented.

I wanted this quiz to have varying difficulties, but how difficult where they on a scale of 1-10?

Beginner:

- 1 2 3 4 5 6 7 8 9 10

Intermediate:

- 1 2 3 4 5 6 7 8 9 10

Did you like the questions, If no, could you think of any improvements?

YES No

If you have any other suggestions, please feel free to note them down here.

Thank you for taking the time to fill out this form, and complete the quiz. Your feedback will be reviewed as soon as possible.

User Questionnaire [3]

Science Quiz Space and the World around us |Survey|

For this survey, I would like to ask you a few questions relating to your thoughts about the educational science quiz which I have created.

I found the experience to be very interesting

Did you run into any issues when using this quiz?
(Quiz crashed or items not displaying correctly)

YES

No

If yes, please detail any issues below:

How beneficial was this quiz for you, were the
questions educational?

(If yes, please rate out of 1 -10)

YES

No

- 1 2 3 4 5 6 7 8 9 10

How well presented was the quiz?

- Very well presented Decently good Needs improvements
- Other:

What Did you like and dislike about the presentation of this quiz?

I wanted this quiz to have varying difficulties, but how difficult where they on a scale of 1-10?

Beginner:

- 1 2 3 4 5 6 7 8 9 10

Intermediate:

- 1 2 3 4 5 6 7 8 9 10

Did you like the questions, If no, could you think of any improvements?



YES



No

If you have any other suggestions, please feel free to note them down here.

Thank you for taking the time to fill out this form, and complete the quiz. Your feedback will be reviewed as soon as possible.