**Initialization**

**Participant**

* As a participant I can start the experiment as a hider / opener. Depends on the link in which I used to redirect to the experiment.

**System**

* As a system I want to prevent user from doing the experiment more than once.
* As a system I want some of the participants to be hiders and some to be openers. There will be separate link for each room (rooms are : opener and hider).

**Consent**

**Participant**

* As a participant I see the terms and conditions and bellow checkbox for accepting them.
* As a participant I can accept or either not to accept the terms.

**System**

* As a system I want to prevent users that didn’t not accept terms from proceeding to the next steps of the experiment.
* As a system I want to navigate users who did accept the terms to the next app in the sequence.

**Data**

|  |  |  |
| --- | --- | --- |
| start\_time | end\_time | user\_accepted\_terms |
| Utc time | Utc time | True/False |

**Instructions**

**Participant**

* As a participant I see the instructions and click proceed in order to advance to the next app.

**Data**

|  |  |
| --- | --- |
| start\_time | end\_time |
| Utc time | Utc time |

**Test**

**Participant**

* As a participant I can answer each of the questions and click submit when done. After I submit :
  + If I answer some question **incorrectly** I see an error message “Incorrecr answer” below each question in which I have submitted wrong answer.
  + If I answer some questions **correctly** I see a success message “Correct Answer” below each question in which I have submitted correct answer.
  + I see a success/error message 🡪 Success! you answered all questions correctly. / You answered some questions incorrectly.
  + I see advance/try again/failure message 🡪 You may click Proceed and advance to the next step. / Please try again. / Since you exceeded the amount of accepted attempts you are asked to exit the experiment.

**Data**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| start\_time | end\_time | q[x]\_attempts | did\_fail | number\_of\_attempts |
| Utc time | Utc time | {  correct : True/False  value : {  hider : number  opener: number  }  attempt\_number : number  } | boolean | number |

**System**

* As a system I want to prevent from submitting more than twice.
* As a system I want to redirect the participant to next page / end page. Depends on his test result.

**Board**

**All Participants**

* This app has n rounds . Each round represents a set. A set is represented by a collection of boxes and their multipliers, as well as total number of objects:
  + An example for a set is 🡪 [1,2,3,4] , 48 .
* The order of the sets is shuffled for each participant.

**Hider**

* As a hider I see some instructions for this step.
* As a hider I can see the number of objects in storage.
* As a hider I can see for each box – it’s multiplier and the number of objects currently assigned to it.
* As a hider I can see “back” and “next” buttons. “next” is initially disabled.
* As a hider I’m able to change the amount of object that are stored in each box by clicking on the current number of objects in the box and changing it to a different number.
* As a hider if I assigned to boxes more objects then the total amount available in the current set:
  + The storage will **not** show negative number. Instead will not display any number.
  + An **error** message will appear “You have matched more objects then you are allowed to”
  + The “**next**” button will be disabled.
* As a hider If I assigned all objects to boxes and the number in storage is 0:
  + The “**next**” button will be **enabled**.
  + The “**back**” button will be **disabled**.
* As a hider if I click the “back” button the board resets to its initial point.
* As a hider if I click next :
  + The amount of object in each box is multiplied by the box multiplier.
  + A description message is displayed 🡪 The number in each box is now the calculated number of object you assigned to it after multiplication.
  + A proceed message is displayed 🡪 You may click proceed and advance to the next step.
  + A Proceed button is displayed. Clicking it advances the participant to the next step.

**Hider Data**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| start\_time | end\_time | [round].set\_details | actions | box[n].final\_value |
| Utc time | Utc time | {  number\_of\_object : number  multipliers : [number]  } | {  box\_index : number  previous\_value : number  new\_value : number  } | number |

**Opener**

* As a opener I see some instructions for this step.
* As an opener I can see the number of objects in storage.
* As an opener I can see for each box – it’s multiplier. Below each box I have a radio button for selecting / unselecting the box. The initial value for each box is unselected.
* As an opener I can see “back” and “next” buttons. “next” is initially disabled.
* As an opener if I click the “back” button the board resets to its initial point.
* As an opener if I mark exactly 2 boxes as selected:
  + The next button is enabled.
  + The back button is disabled.
* As an opener if I click next I’m being advanced to the next step.

**Opener Data**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| start\_time | end\_time | [round].set\_details | actions | box[n].final\_value |
| Utc time | Utc time | {  number\_of\_object : number  multipliers : [number]  } | {  box\_index : number  previous\_value : boolean  new\_value : boolean  } | boolean |

**Feedback**

**Participant**

* As a participant I’m being asked an open ended question and I’m able to answer it by writing some text.

**System**

* As a system I want to validate that the participant did not leave an empty answer.

**Data**

|  |  |  |
| --- | --- | --- |
| start\_time | end\_time | answer |
| Utc time | Utc time | text |

**End**

**Participant**

* As a participant I am directed to this page if the experiment has ended successfully / unsuccessfully.
* As a participant I get an ending with failure/success message 🡪 The experiment has ended successfully / The experiment has ended .