**\*\*\* Part 1: What You Need to Know \*\*\***

First of all, let me briefly introduce **Marking Menu** and **Radial Menu** to you.

**Marking Menu** is a circular context menu that users can select items by moving cursor in different directions. Initially items will be showed up around the cursor as a circle. Then moving cursor to an item means selecting that item, or going to next level under that item with generating a new circle. The new circle for next level will surround the previous selected item, which means it will have a different centre compared with the initial one.

**Radial Menu** also has a circular context interface, however users must always click an item to select or go to next level. When clicking an item for entering next level the content circle will hardly move, which means the centre of **Radial Menu** should be fixed since initialization.

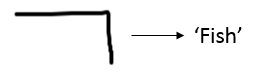
In this experiment, **Marking Menu** and **Radial Menu** will be presented as below:

|  |  |  |
| --- | --- | --- |
| Execution | Marking Menu | Radial Menu |
| *Open menu and go to the second level ‘Animals’* | (Stroke to ‘Animals’) | (Click ‘Animals’) |
| *Select ‘Fish’ from the second level* | (Stroke to ‘Fish’) | (Click ‘Fish’) |

In order to make use of the two menus, you should learn the following mouse/touchpad inputs:

|  |  |  |
| --- | --- | --- |
| Function | **Marking Menu** | **Radial Menu** |
| *Popup Menu* | *Left Click Down* | *Right Click* |
| *Select Item* | *Stroke to Leaf Node* | *Move to Leaf Node and Left Click* |
| *Reset Menu* | *Release Left Click Down* | *Right Click* |

Note that **Marking Menu** takes 1 second to popup, and you can make a fast stroke to select item instead of waiting for the menu to pop up.



For instance, the continuous stroke ‘right-down’ will select ‘Fish’ from the previous **Marking Menu** example.

**\*\*\* Part 2: What You Need to Do \*\*\***

The task for you is simply selecting a desired item from **Marking Menu** or **Radial Menu** as one trial, and there will be **72** trials in total for you to complete the whole experiment.

The experiment time is **unlimited** for you, but you are encouraged to do it as fast as you can.

After completing **36** trials, you can take a **3** minutes break.

Before you start each trial, please check the following settings or requirements carefully:

|  |  |
| --- | --- |
| Setting / Requirement | Explanation |
| *Menu Type* | *Menu type used for current trial* |
| *Menu Depth* | *Number of levels for the menu* |
| *Menu Breadth* | *Number of items for each level* |
| *Input Device* | *Input device supposed to be used* |
| *Please Select* | *Desired item for user to select* |

Note that **Menu Depth** also indicates which level the desired item can be found at.

For example, if you see the following settings and requirements:

* Menu Type: Marking
* Menu Depth: 2
* Menu Breadth: 4
* Input Device: Mouse
* Please Select: Banana

This means you are currently using Marking Menu with 2 levels, for each level there will be 4 items, and you should use a mouse to select the item ‘Banana’ on level 2 of the menu.

The item you select will be recorded and displayed. If you select a wrong item, feel free to reset the menu and do it again.

After completing one trial, please click ‘Next’ to go for the next trial. Once you click ‘Next’, you will not be able to go back to the previous trial.

If you still have any doubts, please contact us before starting the experiment.

Thanks!