

Introduction to GEM (GEstures with Mouse)

Welcome to GEM (GEstures with Mouse)...! It is an input mechanism which uses gestures as input to the system. Gestures can be drawn using a mouse or some equivalent device like touch pad, joystick, pen tablet etc.

This Input mechanism is intended for people suffering with different kinds of motor disabilities, who may face problems in using mouse and keyboard in conventional way. Hence, it provides them with an alternate and effective mechanism for using the system to perform various tasks such as navigation, executing commands & keyboard shortcuts, and launching applications etc. on Linux desktop.

Terminology

- Gesture: Pointing device movements alongwith clicks recognized by the software.
- Stroke: A single complete movement
- GUI: Graphical User Interface

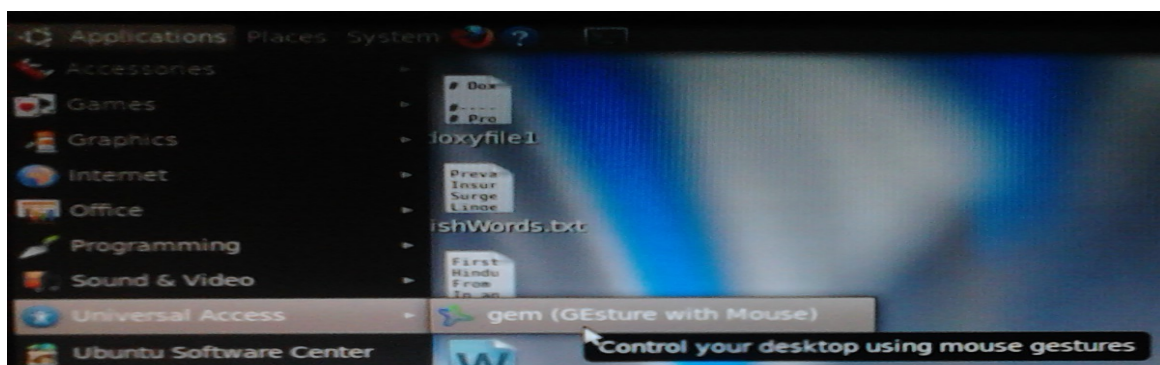
How to use GEM..?

Under this section we will see the following things:

1. Start GEM Application.
2. Recording continuous (Single-part) gestures.
3. Recording discontinuous (Double-part) gestures.
4. Modifying recorded gestures details.
5. Deleting recorded gestures.
6. Executing recorded gestures.
7. Advanced Options selection.
8. Close GEM Application.

Start GEM Application

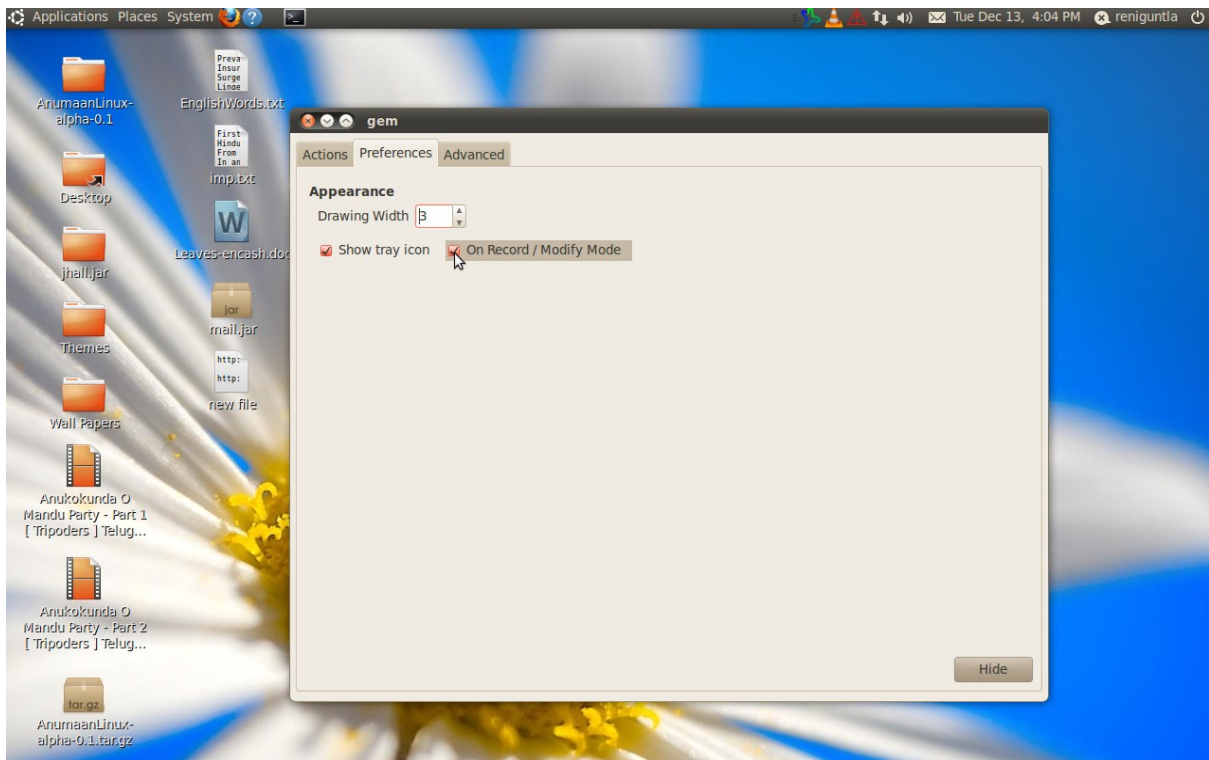
To start GEM application, click on Applications->Universal Access->gem (GEstures with Mouse) or Type **gem** in terminal.



Recording Continuous (Single-Part) Gestures

Step -1

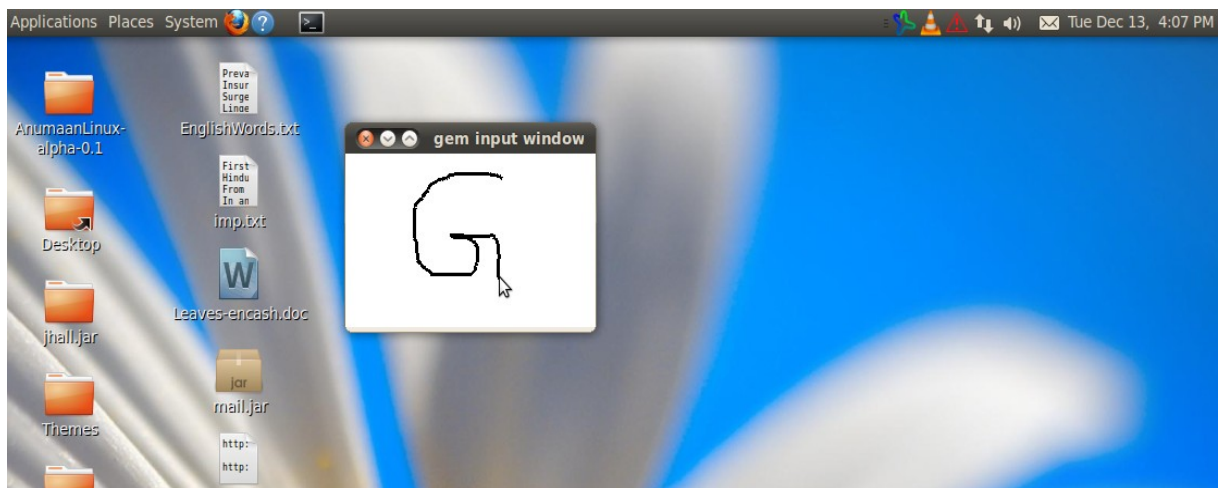
Check **On Record/Modify Mode** in **Preferences** tab of GEM GUI.



Step-2

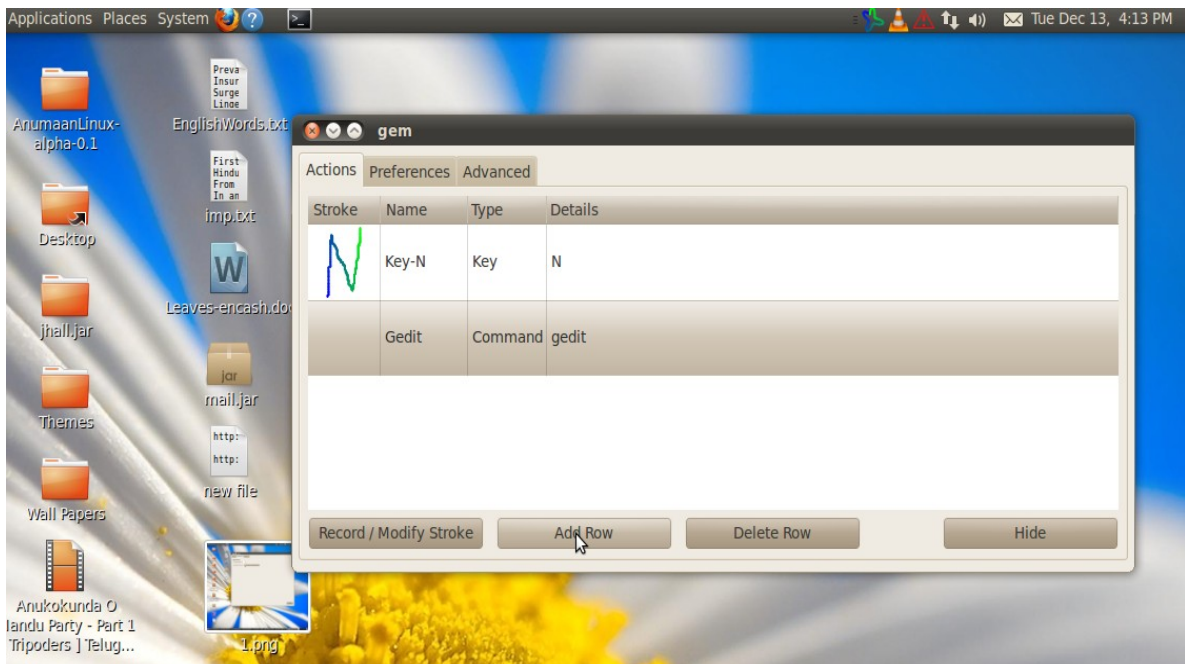
Draw gesture to be recorded inside *gem input window*. To Draw a gesture, use following steps:

1. To start drawing, click & release Mouse Button-1 (left button) in *gem input window*.
2. Draw gesture by moving mouse pointer inside *gem input window*.
3. To end drawing, click & release Mouse Button-1 (left button) in *gem input window*.



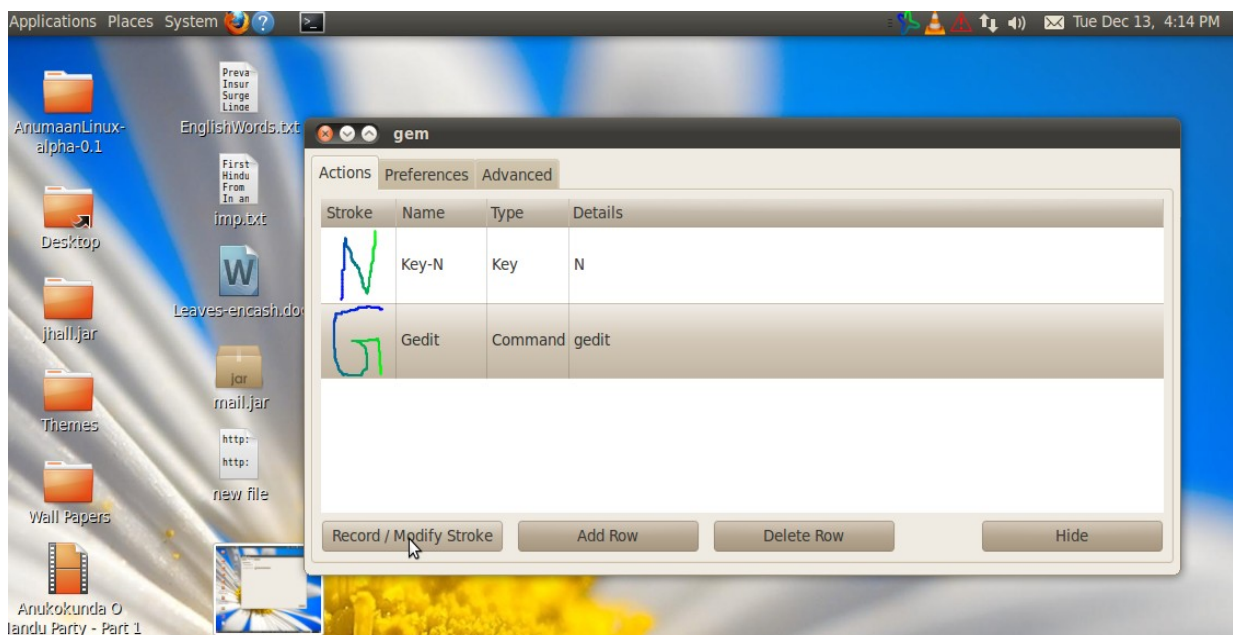
Step-3

Now go to **Actions** tab in GEM GUI and click on **Add Row** button. It will add a new row in Actions Tab. This row provides fields to specify various details related to gesture being recorded like gesture name, action type etc.



Step-4

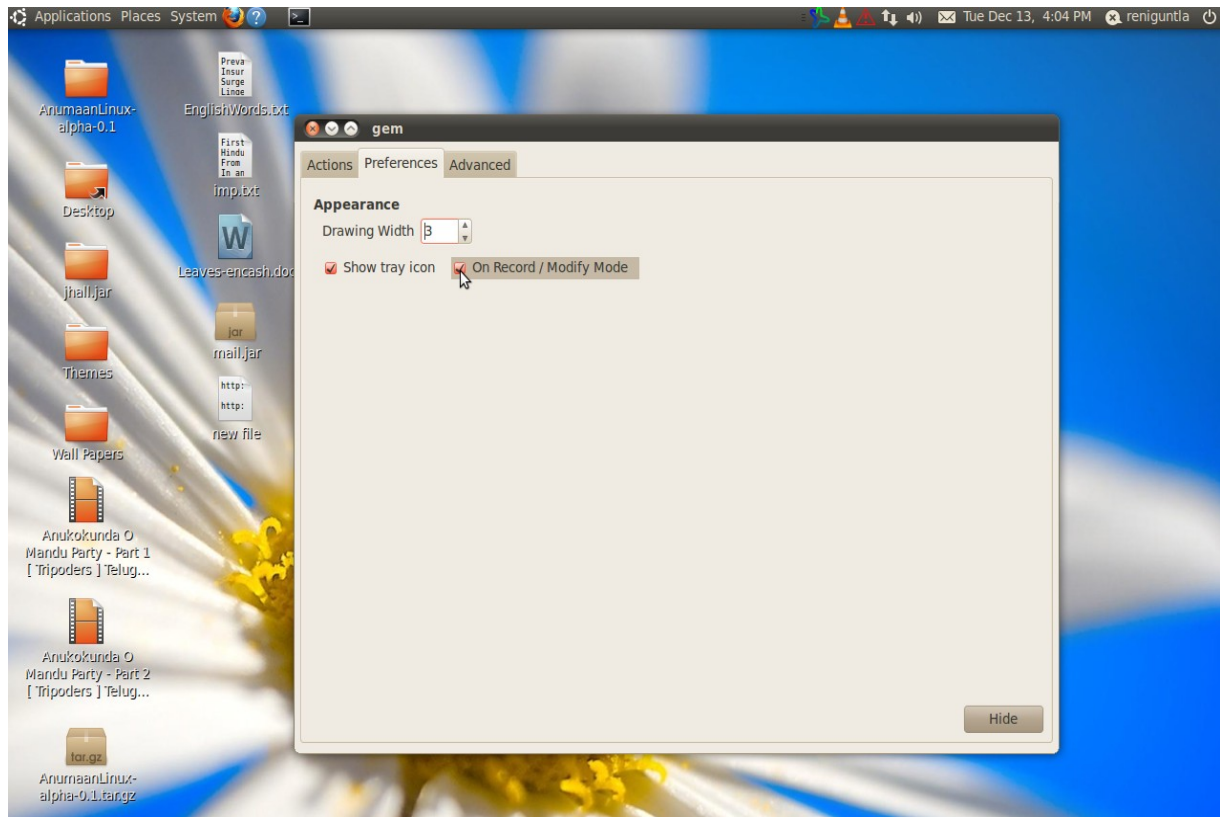
Once all relevant details are specified in the newly created row, ensure that it is highlighted. If not, highlight it by clicking over it. Then, click on **Record/Modify Stroke** button.



Recording Discontinuous (Double-Part) Gestures

Step-1

Check *On Record/Modify Mode* in *Preferences* tab of GEM GUI

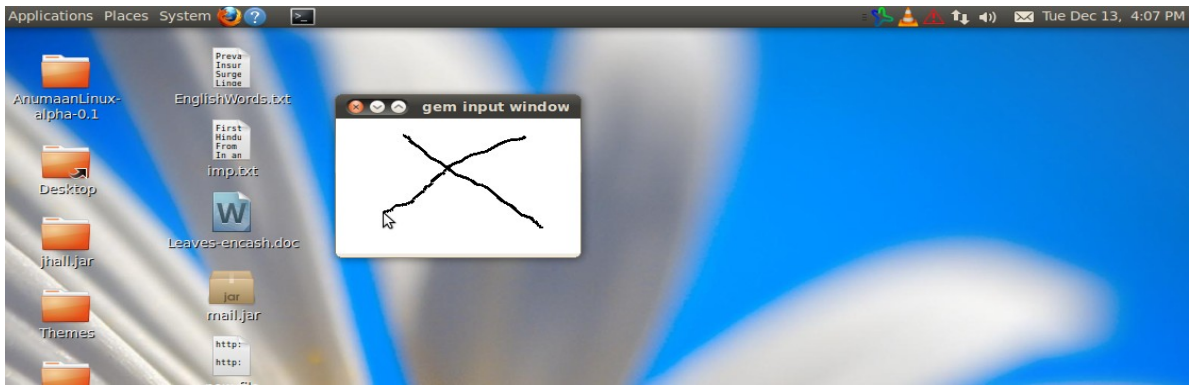


Step-2

To draw discontinuous gesture to be recorded, use following steps:

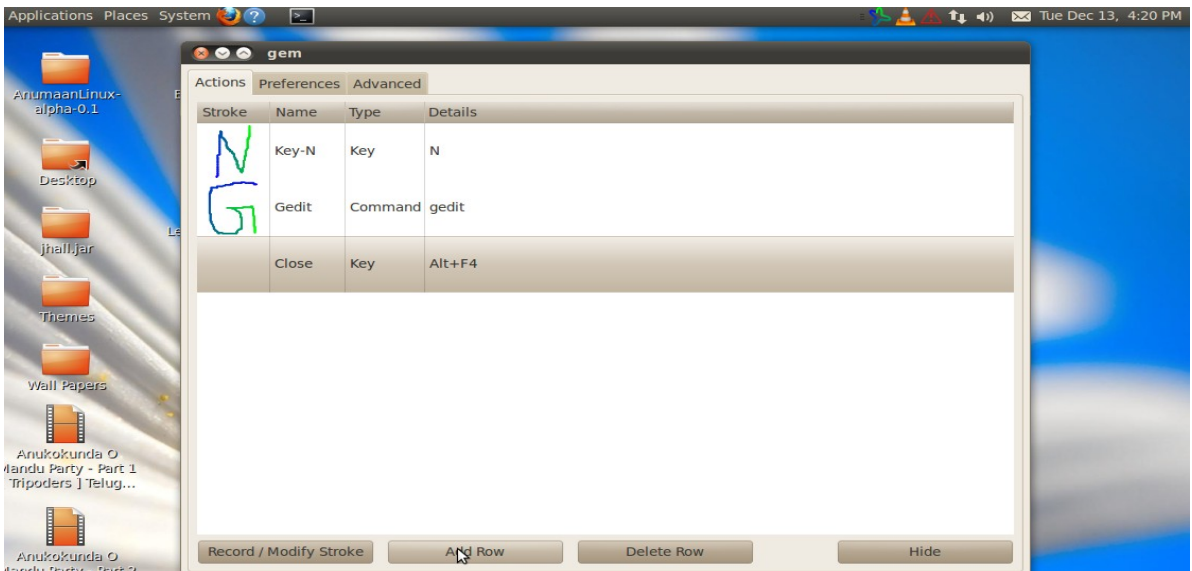
1. To start drawing discontinuous gesture, click & release Mouse Button-1 (left button) in *gem input window*.
2. Draw first part of discontinuous gesture by moving mouse pointer inside *gem input window*.
3. To end first part of discontinuous gesture drawing, click & release Mouse Button-1 (left button) again in *gem input window*.
4. To start second part of discontinuous gesture drawing, click & release Mouse Button-1 (left button) in *gem input window* at desired location within 2 seconds after step-3.
5. Draw second part of discontinuous gesture by moving mouse pointer inside *gem input window*.
6. To end discontinuous gesture drawing, click & release Mouse Button-1 (left button) in *gem input window*.

Following screenshot shows drawing a discontinuous gesture.



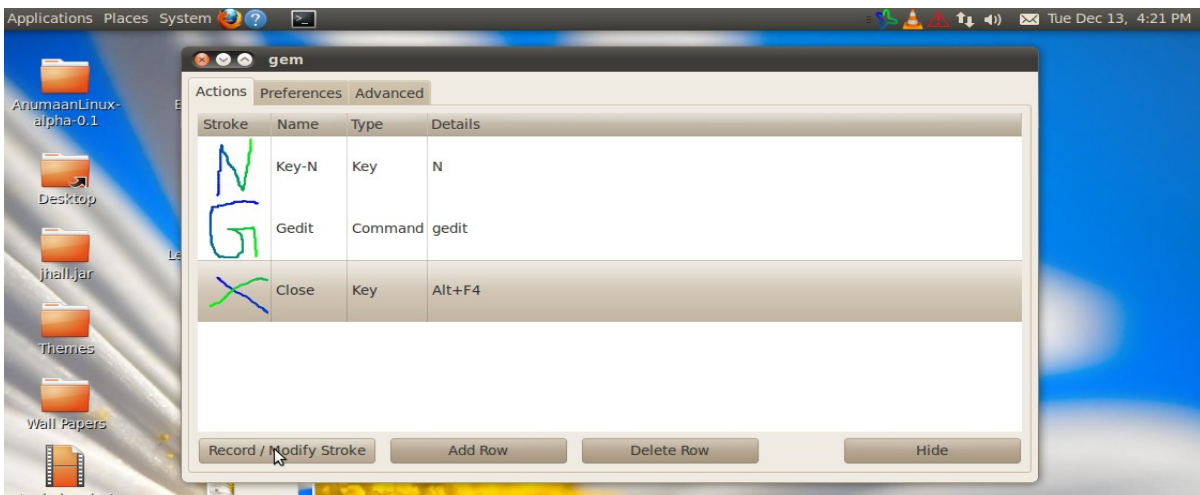
Step-3

Now go to **Actions** tab in GEM GUI and click on **Add Row** button. It will add a new row in Actions Tab. This row provides fields to specify various details related to gesture being recorded like gesture name, action type etc.



Step-4

Once all relevant details are specified in the newly created row, ensure that it is highlighted. If not, highlight it by clicking over it. Then, click on **Record/Modify Stroke** button.



Modifying Recorded Gestures Details

1. To modify recorded gesture details like name, type and other details, highlight the corresponding row by clicking on it in **Actions** tab of GEM GUI and then edit them.
2. To record new gesture, follow above mentioned steps.

Deleting Recorded Gestures

1. To delete already recorded gesture, highlight the corresponding row in **Actions** tab of GEM GUI and then click on **Delete Row** button.

Executing Recorded Gestures

1. **Uncheck On Record/Modify Mode** in **Preferences** tab of GEM GUI.
2. Draw already defined Continuous or Discontinuous gesture in *gem input window*.
3. If drawn gesture is recognized, associated action will be performed. A flash label will also be displayed as a feedback that gesture is recognized.

Advanced Options selection

1. In **Advanced** tab of GEM GUI, all connected pointer input devices like mouse, pen tablet, joystick etc are listed.
2. From those listed input devices, one can select any one device to draw gestures in *gem input window*.

Close GEM Application

To close GEM, right click on GEM icon in panel, then left click on **Close** option.

