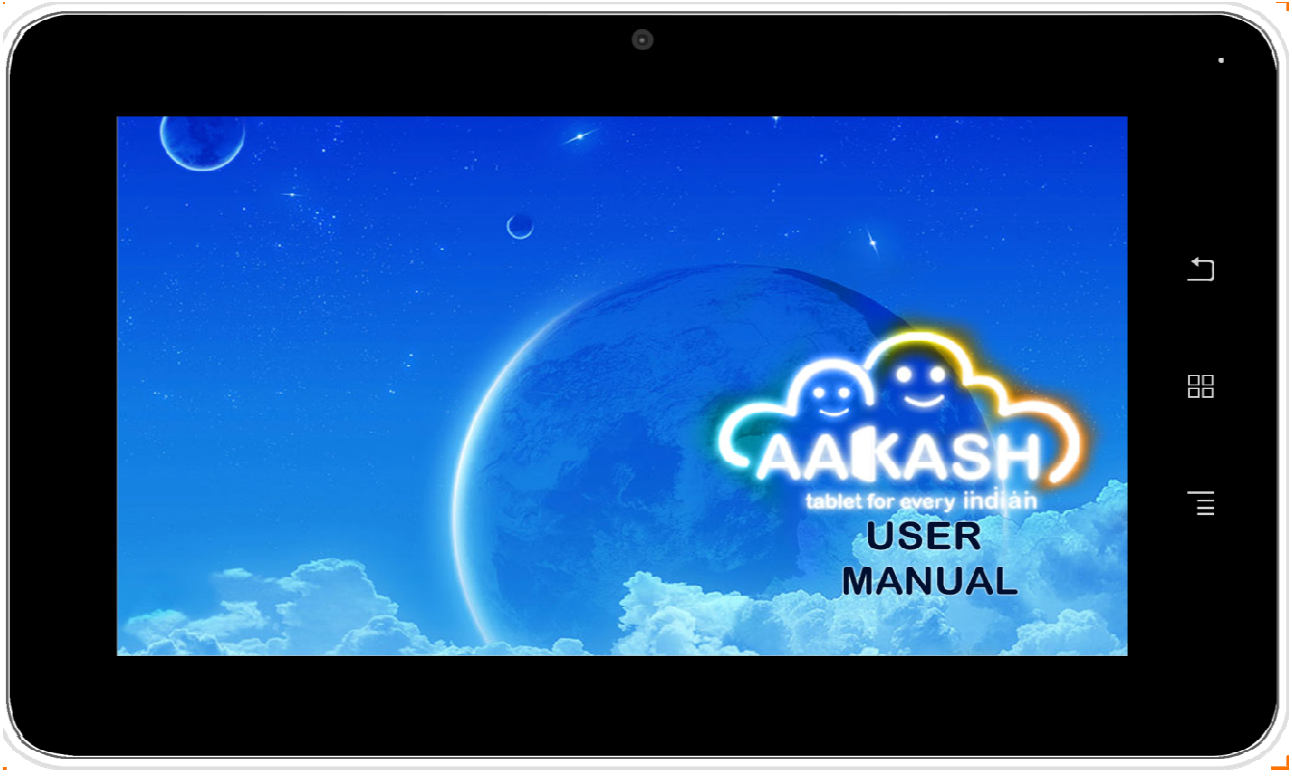
AAKASH
tablet for every indian
USER
MANUAL

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Your Aakash Tablet

Aakash tablet was launched in India by MHRD for educational use. In near future, Government of India plans to deploy Millions of these tablets amongst students, to enhance the effectiveness of their learning.

Aakash is now available in an enhanced version (Aakash-2) of the original tablet. It has a 1 GHz processor, 512 MB memory, 4GB portioned NAND flash, a capacitive touch screen. It runs the Android 4.0 Operating System. Future versions of the tablet will continue to have further enhancements. Under the National Mission on Education through Information and Communication Technologies (NME-ICT), IIT Bombay is conducting a project for empowerment of teachers using these tablets. Apart from the standard applications available on Android, several important educational applications and contents have been added by IIT Bombay. These are being distributed in Open Source.

The tablet you are using is procured by IIT Bombay as a part of this project, and has been issued to you at no cost, for use in your college for educational purposes. As such, it shall remain the property of IIT Bombay. Feedback from students and teachers will help improving it further.

Please visit http://www.it.iitb.ac.in/aakash2 for more details, and for the latest version of the manuals.

Copyright

Aakash logo is the copyright of NME-ICT, MHRD, Government of India

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User Manual Version 1.1 - October 2012

Charging Battery

Your device has a built-in battery. **Before using the device for the first time, you must charge the battery for 6 to 8 hours.** Use only datawind approved chargers. Unauthorized charger may cause damage to your device and / or may lead to overcharging and explosions. When your battery is low, the battery level indicator will be very thin. The device will automatically turn off after the battery is drained out.. Recharge the battery to continue use. Recharge the battery, by first inserting the cable into the charging point and then plugging into a standard AC power outlet. After charging, unplug the charging head from the power outlet and remove the cable from the device.

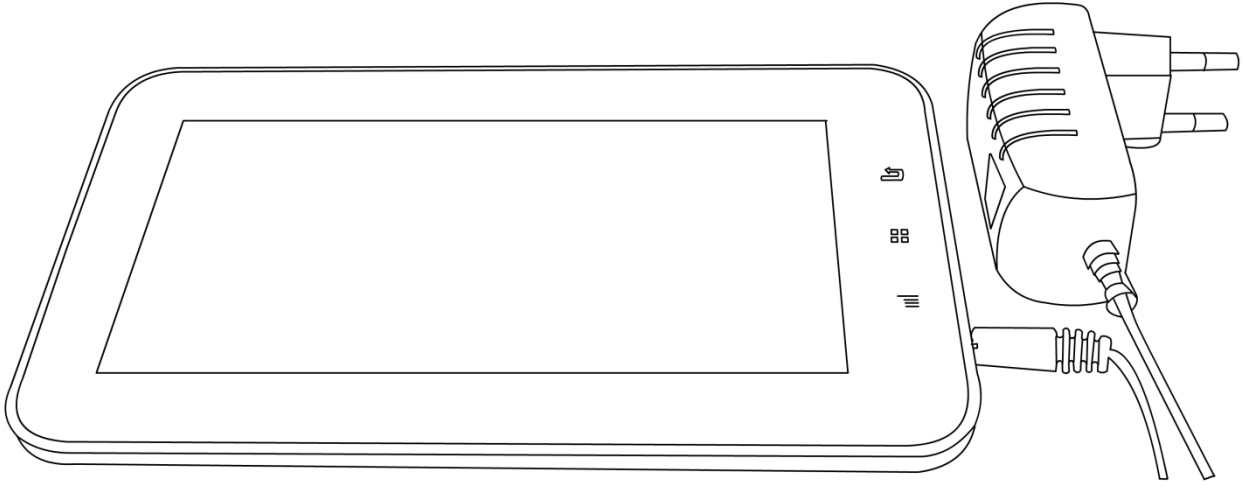


Fig 1

Memory Card

Memory card is to store additional files. Your device accepts micro SD Card with a maximum capacity of 32GB (this varies by memory card manufacturer).

Insert the memory card into the tablet as shown in the figure given on the right. Push the memory card into the tablet till you feel the click.

To remove the memory card from the tablet, press the memory card till you feel the click. Pull the memory card from the tablet.

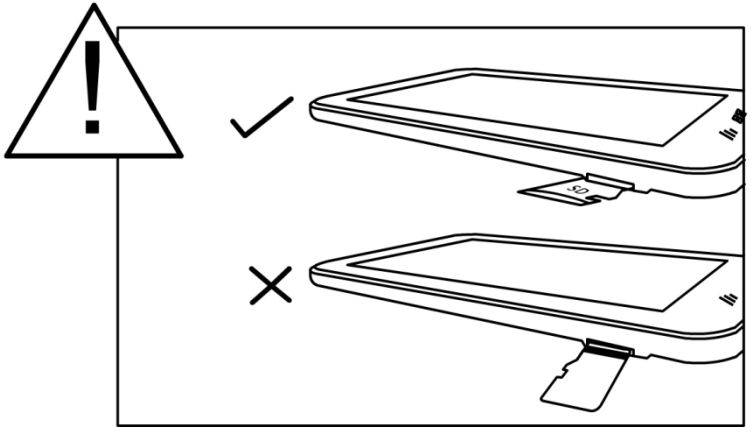


Fig 2

1) Getting Started

1.1) Isometric View

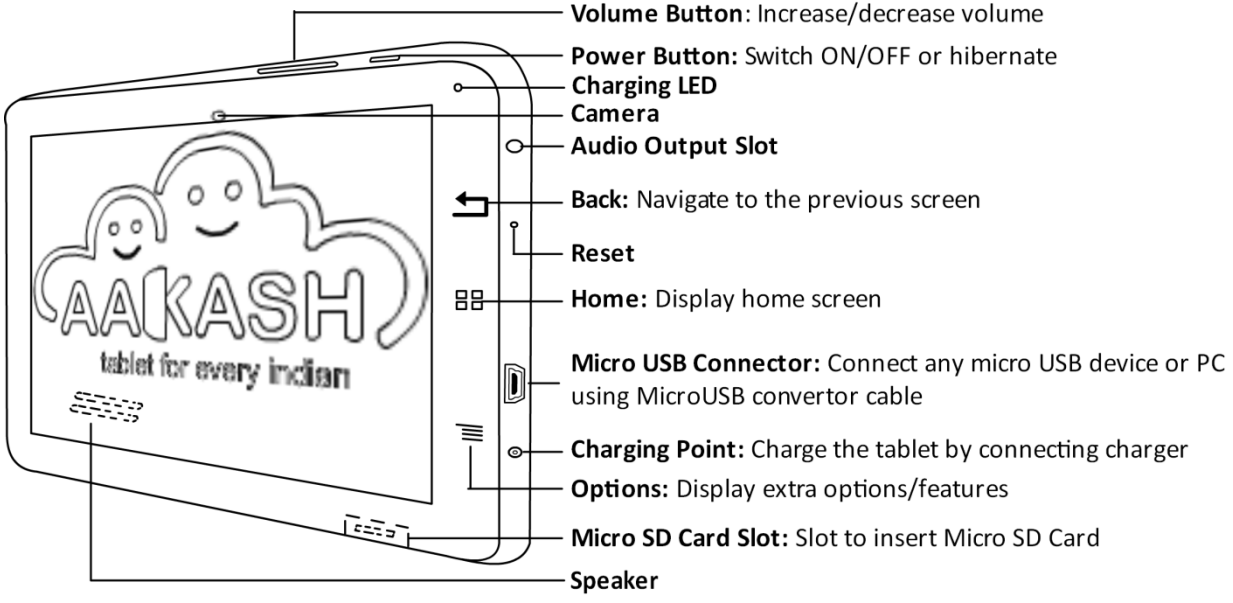


Fig 3

1.2) Switch ON/OFF

1.2.1) Switch ON

Press the power button for 3 seconds to switch on the tablet. The following screen will be displayed when the tablet switches on.

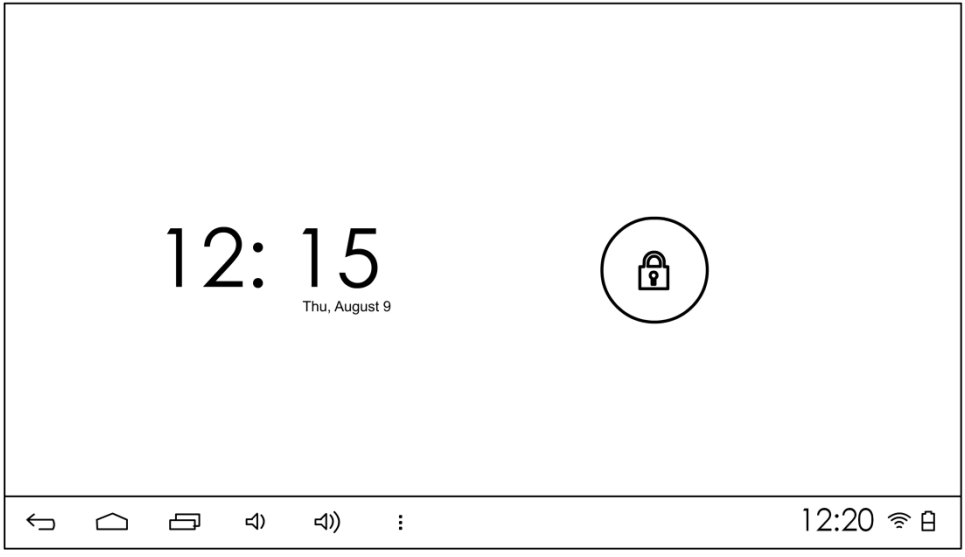


Fig 4

1.2.2) Switch OFF

Press the power button for 3 seconds to switch off the tablet. Select “OK” to confirm switching off. Select “Cancel” to avoid switching off the tablet.

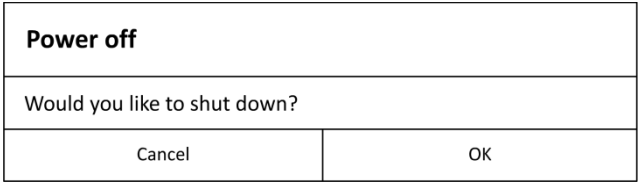


Fig 5

1.3) Lock / Unlock

1.3.1) Lock Screen

Press the power button to lock the screen. The tablet will hibernate into sleep mode. The tablet also hibernates and the screen gets locked if, it is not used for certain amount of time.

1.3.2) Unlock Screen

To unlock the screen, press the power button. The home screen will be displayed, but the screen will remain locked. If no action is performed within 5 seconds, the tablet will hibernate into sleep mode again. After pressing the power button slide the lock icon from the current position towards the “unlock” icon, positioned on the right. Refer 1.4.3 to perform slide operations on touch screen.

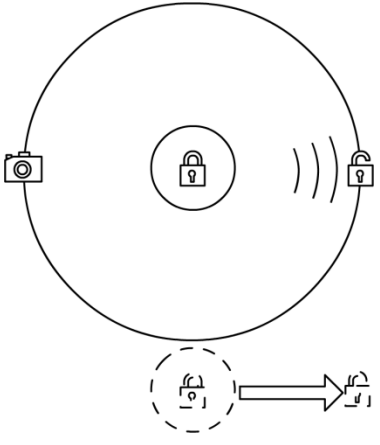


Fig 6

1.3.3) Home Screen

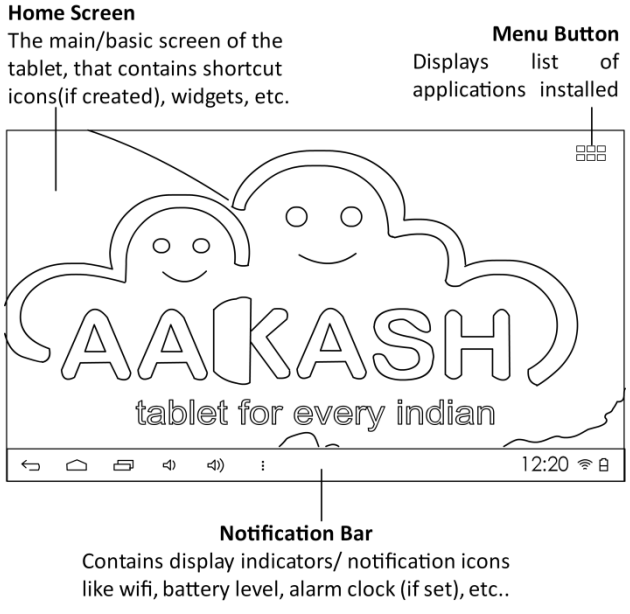


Fig 7

1.4) Operating the Touch Screen

1.4.1) Tap / Touch

Tap or touch the screen with your finger, to select an application or button, or to type using android keyboard.

1.4.2) Touch and hold

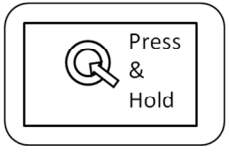


Fig 8

To view more features of the application, or to activate the drag feature, touch and hold the screen for two seconds at the desired position.

1.4.3) Slide

Fig 9

Touch the screen of the tablet and without lifting your finger, slide your finger on to the screen in the desired direction. The action will result the screen image or content to shift up, down, left or right. To view more content placed on the right, slide the finger towards the left.

Similarly, to view more content placed below, slide your finger upwards. This is shown in Fig 11 and Fig 12

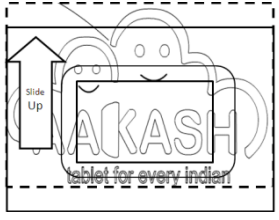


Fig 10

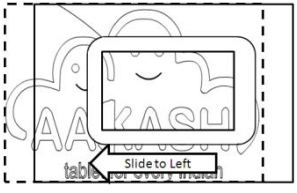


Fig 11

1.4.4) Drag and Drop

Use the drag and drop facility to add, remove and reposition applications. Touch the application icon on the screen that is to be moved, and without lifting your finger from the screen, slide your finger to desired place and release it.

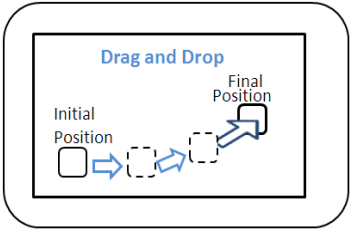


Fig 12

1.4.5) Pinch In

Pinch In operation is used to perform zoom in operation. It is normally used to increase the size of the image or object. The pinch in operation is performed by placing the two fingers(close to each other) on the screen and moving them apart from each other.

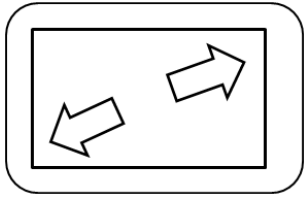


Fig 13

1.4.6) Pinch Out

Pinch Out operation is used to perform zoom out operation. It is normally used to decrease the size of the image/object. The pinch out operation is performed by placing the two fingers(at a distance) on the screen and moving them towards each other.

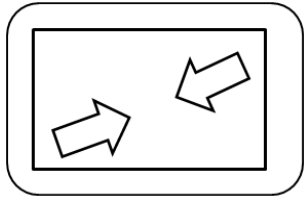


Fig 14

1.5) Display Indicators

The display indicators are present in the notification bar placed at the bottom (Fig 7) of the screen.

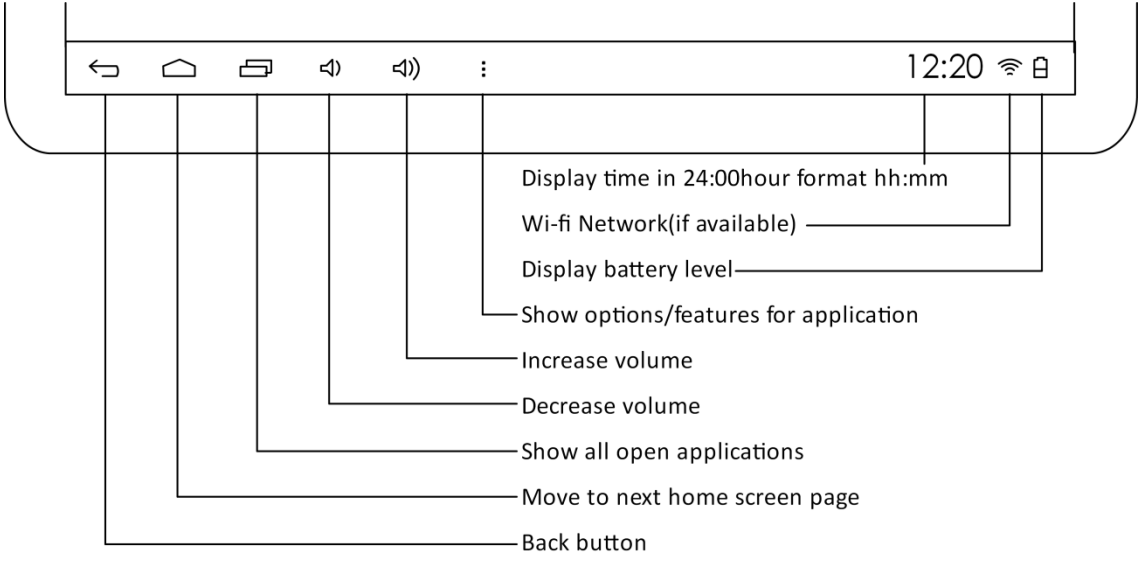


Fig 15

1.6) Tablet Keypad

1.6.1) Alpha Mode

Fig 16

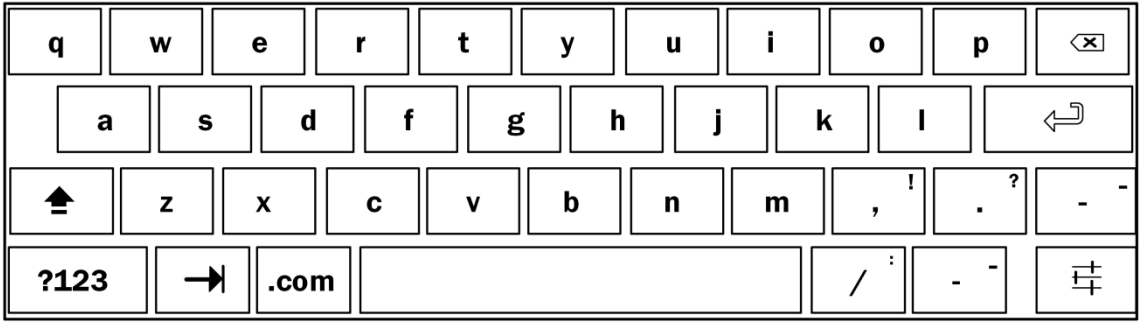
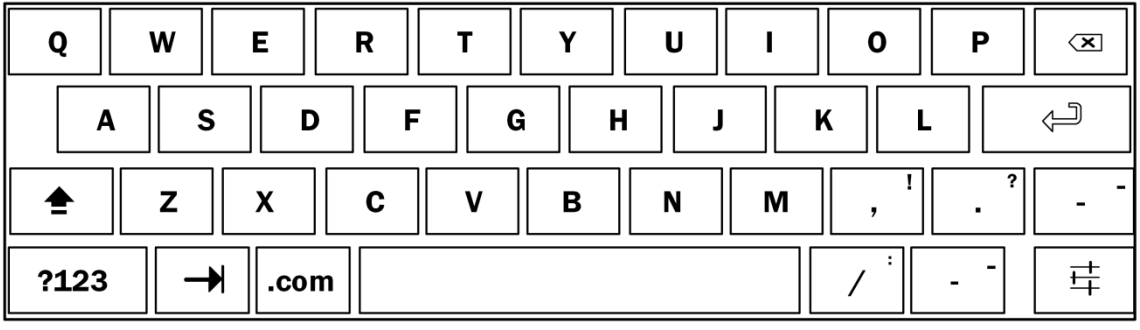


Fig 17



In many text editing applications, a virtual keyboard is used for typing. It has two modes: 1) Alpha; 2) Numeric and Special Characters. In a text editing/browsing application, the mode is lower case by default, but it can be changed, as explained later. Alpha mode (layout on the left page) is used to type lower and upper case alphabets. To type, touch the respective keys on the touch screen. The layout of the virtual keyboard is similar to a typewriter/computer "QWERTY" keyboard, and row 1, 2, and 3 are similar.

The first row has alpha characters: q w e r t y u i o p and Backspace key.

The second row has alpha characters: a s d f g h j k l and Return/Enter key.

The third row has Shift, z x c v b n m comma (,) full stop (.), and hyphen (-).

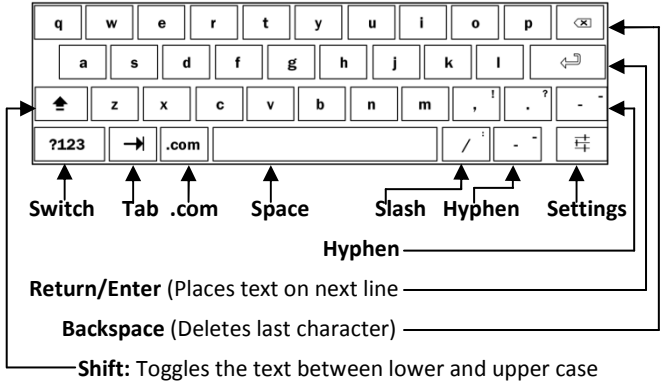
The fourth row has Switch mode, tab (→|), (.com), long central key space, forward slash (/), hyphen(-), and Settings key.

The first row has alpha characters: Q W E R T Y U I O P, and Backspace key.

The second row has alpha characters: A S D F G H J K L, and Return/Enter key.

The third row has Shift, Z X C V B N M, comma (,) full stop (.), and hyphen (-).

The fourth row is same as that in lower case



Tap Once : Converts only next letter from lower to upper case.
e.g. a b c Shift A b c".

Tap Twice: Convert rest of the text from lower to upper case.
e.g. "a b c Shift Shift a b c".

Convert : Upper to lower case, touch the key once.
e.g. "A Shift a b c"

Fig 18

1.6.2) Numeric and Special Character Mode

Fig 19

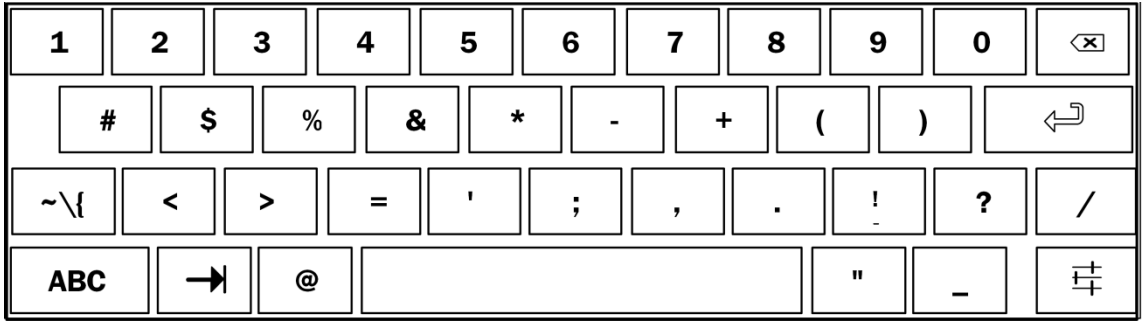
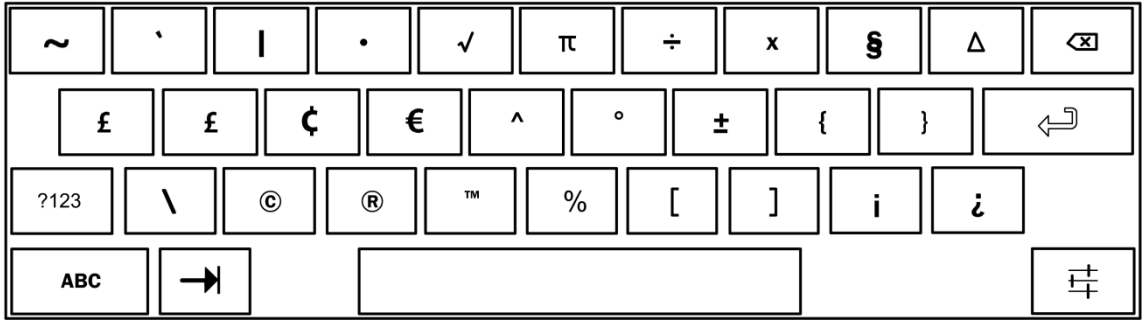


Fig 20



This mode is used to type numbers or special characters. The general layout of this mode is shown below. Touch the "Alt" key to view and utilize other available special characters/numbers. The numeric mode is activated using the "Switch mode" key on the keypad. To switch back to the alpha mode, again press the "Switch mode" key. It is a toggle key that switches between two modes. Touch the respective keys on the touch screen of the virtual keyboard to type.

The top row has numbers from 0 to 9, "1 2 3 4 5 6 7 8 9 0" and Backspace key.

The second row consists of special characters. "# $ % & * - + ( )", and Return/Enter key.

The third row also consists of special characters. The left edge has "~\{" i.e. Alt key.

The fourth row has Switch mode, tab (→|), @, long central key space, double quotes ("), underscore (_), and Settings key.

The top row has ~ ` | • √ ∏ ÷ × § Δ and backspace key.

The second row has Pound, Cent, Euro, ^ º ± { }, and Return/Enter

The third row has "?123", \, ©, ®, ™, ℅ [,], ¡, and ¿.

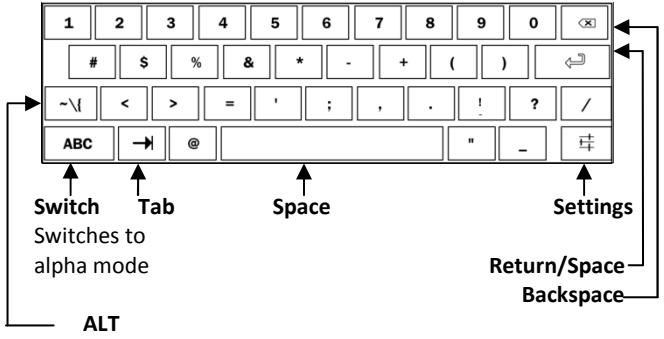


Fig 21

The fourth row, has Switch mode, tab (→|), a long central key space, and Settings.

2) Customize Desktop

Touch the Option button '⋮' present in the notification bar. A list is displayed containing 'Wallpaper', 'Manage apps', 'System settings' as shown below.

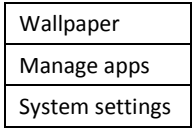


Fig 22

2.1) Add to Home Screen

2.1.1) Wallpaper

Touch Wallpaper

Touch the source of wallpaper (Gallery - image captured from camera; Live Wallpaper- animated wallpapers; Wallpaper-images)

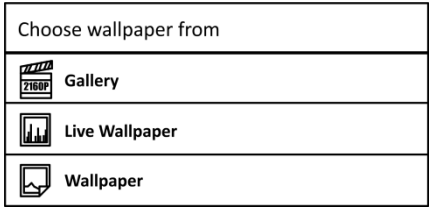


Fig 23

Browse through the list using slide operation(E.g. Wallpaper)

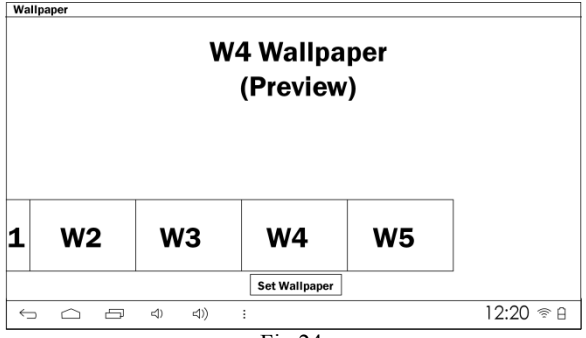


Fig 24

Touch Set Wallpaper.

2.1.2) Shortcuts/Apps

Touch the menu button on the home screen, which displays a list of applications.

Browse through the list.

Touch and hold the desired application. The application will be selected and the home screen will be displayed

Drop the application at the desired position on the home screen by lifting the finger from the screen.

2.1.3) Widgets

Touch the menu button on the home screen, which displays a list of applications installed.

Touch Widgets tab

Browse through the list of widgets in your tablet.

Touch and hold the desired widget. The widget will be selected and home screen will be displayed.

Drop the widget at the desired position on the home screen by lifting the finger from the screen.

2.2) Delete from Home Screen

Touch and hold the desired item on the home screen.

The selected item will be magnified and the “Trash” icon(X) will be displayed at top center of the screen.

Drag the item over the trash and release it.

When the icon is placed over the “Trash”, the color of the selected item changes to “red”.

3) Select, Cut, Copy, and Paste

Select, cut, copy, and paste are general editing operations that are common to all text editing or text input applications like Notepad, browser search, configuring applications, naming and renaming folders, setting reminders, etc. To perform editing operations, open any text editing application like 'Notepad'.

Touch menu button, which will list all applications installed in the tablet.

Browse through the applications and select Notepad 4.0

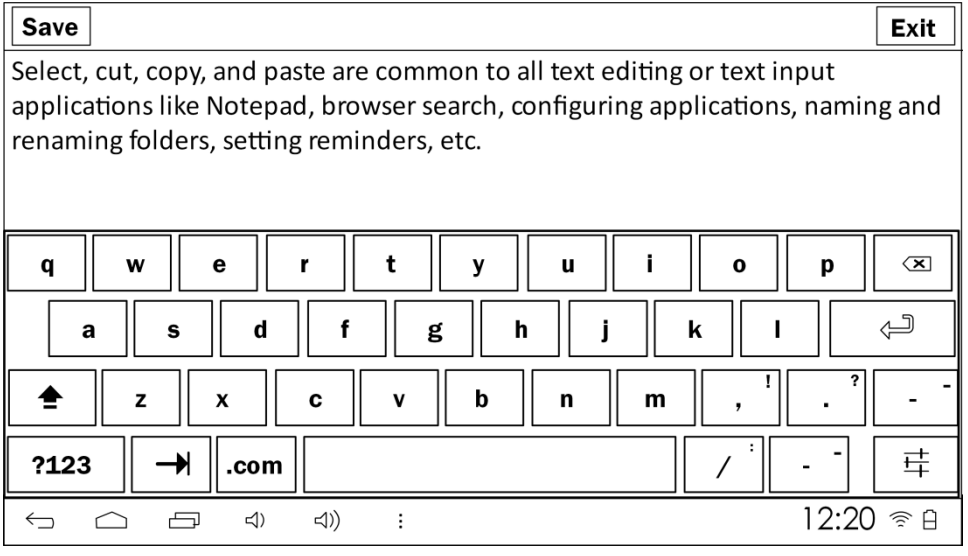


Fig 25

Touch New button. A new blank Notepad page opens. Touch the screen to activate the virtual keyboard, for writing notes. Write the intended notes. The editing options are "Select", "Select all", "Cut", "Copy", and "Paste". All editing operations are performed only after selecting the text.

3.1) Select

Touch and hold the desired area or text for 3seconds.

The current word gets highlighted and is placed in between the start and end tabs (blue color).

Drag the start and end tabs to select more or less text.

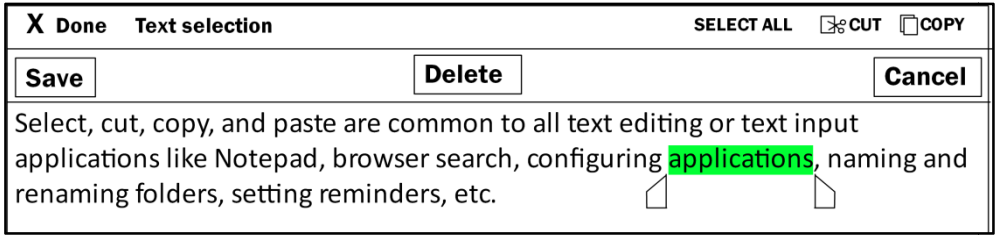


Fig 26

3.2) Select all

Perform Select operation(Refer 3.1)

Touch Select All option placed at the top of the screen

3.3) Cut

Perform Select operation(Refer 3.1)

Touch Cut option placed at the top of the screen

The selected text will be copied onto the clipboard and the text will be deleted from the screen.

3.4) Copy

Perform Select operation(Refer 3.1)

Touch Copy option placed at the top of the screen

The selected text will be copied on to the clipboard for future reference.

3.5) Paste

Perform 'cut', and 'copy' editing operations.(Refer 3.3 and 3.4)

Place the cursor at the desired position, by tapping the screen.

Touch and hold the screen for 3 seconds

Touch Paste button.

4) File Manager

File manager is used to keep track of the files, folders, maintain and create directory structures, for organizing data on the tablet.

Touch Menu button on the home screen.

Touch File Manager Fig 27

This will list all files/folders which are categorized by the storage locations and type, like external memory card, USB, etc..

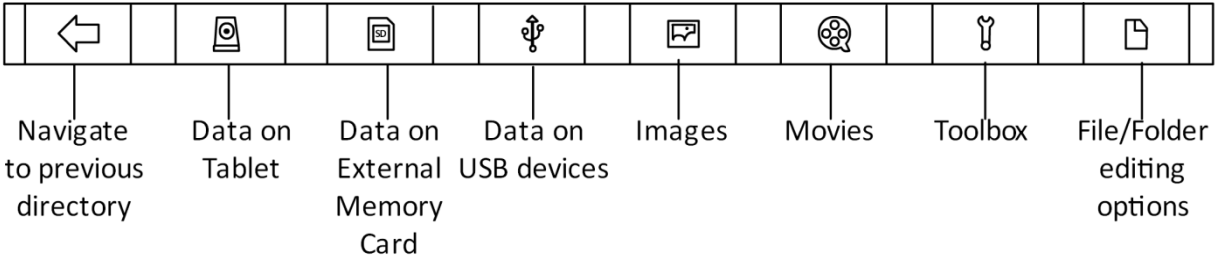


Fig 28

4.1) Organization and Tools

Files or Folders can be created, copied, and stored in various locations. The locations are present at the top of the screen. Touch appropriate storage locations of the files and folders by tapping on respective icons, as shown in Fig 28.

An example that displays a list of images is shown below. Touch a particular image to view it.

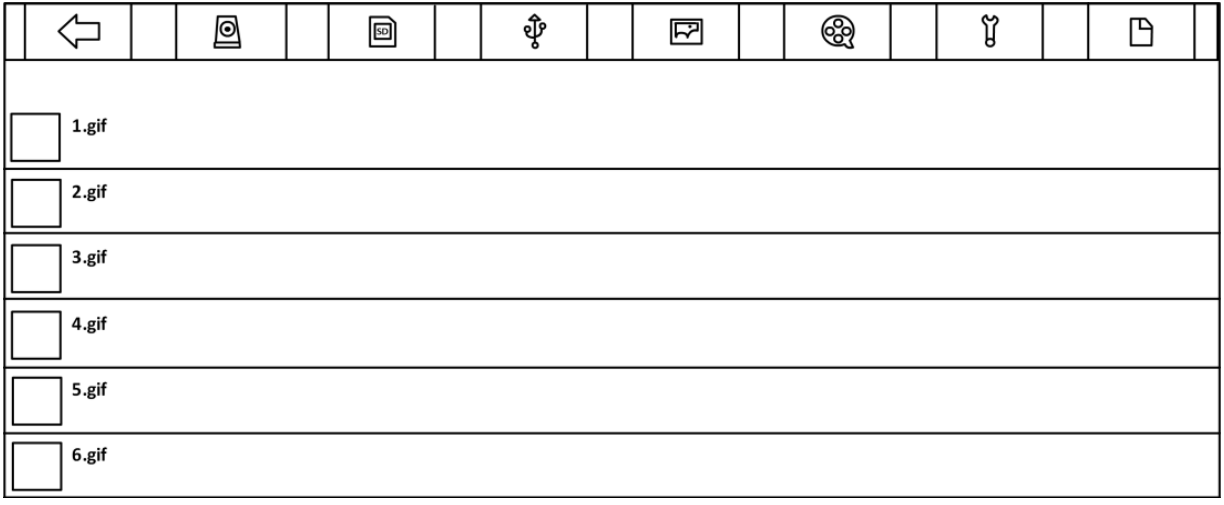


Fig 29

4.2) Navigating to a Directory/File

Select File Manager (Refer 4).

Touch location as shown in Fig 28.

Browse through the folders and select the desired one. Continue browsing and selecting files or folders (if exists).

4.3) Creating a New Directory / Folder

Navigate to the desired directory (Refer 4 and 4.2)

Touch Option button '⋮' present in the notification bar. It will display a list of options.

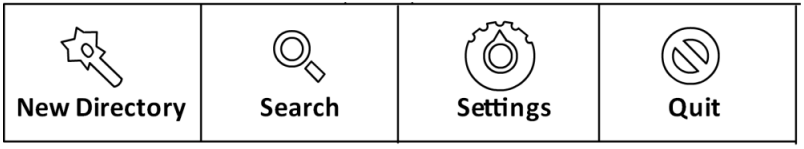


Fig 30

Touch the first option New Directory

Write the name of the directory.

e.g. "Aakash"

Touch Create

A new directory is created in the internal memory of the tablet. This is shown in Fig 32.

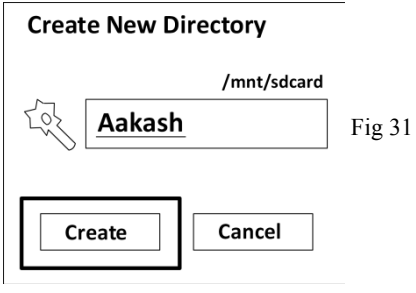


Fig 31

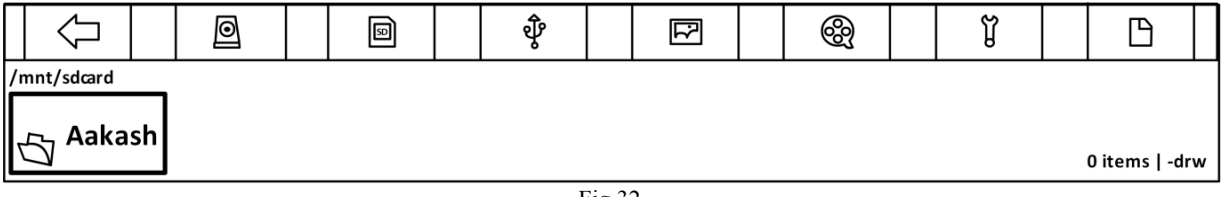


Fig 32

4.4) Operations on Files

The various operations that can be performed on a file are 'Delete', 'Rename', 'Copy', 'Cut', and 'Email'.

File Operations
Delete File
Rename File
Copy File
Move(Cut) File
Email File

Fig 33

4.4.1) Selecting / Marking Single File

Navigate to the desired file(Refer 4.2).

Touch and hold the desired file for 3 seconds.

A list of operations that can be performed on the file are displayed in Fig 33.

4.4.2) Selecting / Marking Multiple Files

Navigate to the desired file(Refer 4.2).

Touch File/Folder Editing options. Refer Fig 28.

Touch the desired files. The selected files will have a green colored tick mark.

4.4.3) Renaming a File

Perform select operation for single file (Refer 4.4.1)

Touch Rename File.

Type the desired name using the keyboard.

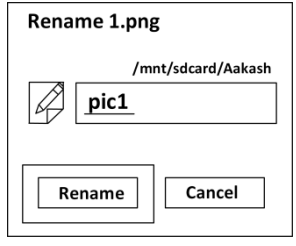


Fig 34

Touch Rename. A confirmation message is displayed after the file is renamed.

4.4.4) Deleting Single/Multiple File/s

Perform select operation for single file (Refer 4.4.1).

Or

Perform select operation for multiple files (Refer 4.4.2).

Touch Delete.

Touch Delete to confirm.

4.4.5) Copy or Move (Single/Multiple) File/s

Navigate to the desired file(Refer 4.2).

Perform select operation for single file (Refer 4.4.1). Or

Perform select operation for multiple files (Refer 4.4.2).

Touch Copy File or Move(Cut) File.

4.4.6) Paste File/s

Perform Cut or Copy operations(Refer 4.4.4 and 4.4.5).

Navigate to the desired directory(Refer 4.2).

Touch File/Folder Editing options. Refer Fig 28.

Touch Paste.

4.5) Operations on Folders

The various operations that can be performed on a folder are 'Delete', 'Rename', 'Copy', 'Cut', 'Zip', 'Extract Here', and 'Paste Into.

Folder operations
Delete Folder
Rename Folder
Copy Folder
Move(Cut) Folder
Zip Folder
Paste into Folder
Extract here

Fig 35

4.5.1) Selecting / Marking Single Folder

Navigate to the desired directory(Refer 4.2).

Touch and hold the desired folder for 3 seconds.

A list of operations that can be performed on the folder are displayed in Fig 35.

4.5.2) Selecting / Marking Multiple Folders

Navigate to the desired folder(Refer 4.2).

Touch File/Folder Editing options. Refer Fig 28.

Touch the desired folder. The selected folder will have a green colored tick mark.

4.5.3) Renaming a Folder

Perform select operation for single folder (Refer 4.5.1).

Touch Rename Folder.

Type the desired name using the keyboard.

Touch Rename. A confirmation message is displayed after the folder is renamed.

4.5.4) Deleting Single/Multiple Folder/s

Perform select operation for single folder (Refer 4.5.1). Or

Perform select operation for multiple folders (Refer 4.5.2).

Touch Delete.

Touch Delete to confirm.

4.5.5) Copy/Move Single/Multiple Folder

Navigate to the desired folder(Refer 4.2).

Perform select operation for single folder (Refer 4.5.1).

Or

Perform select operation for multiple folder (Refer 4.5.2).

Touch Copy or Move(Cut).

4.5.6) Paste Folder/s

Perform Cut or Copy operations(Refer 4.4.4 and 4.4.5).

Navigate to the desired directory(Refer 4.2).

Touch File/Folder Editing options. Refer Fig 28.

Touch Paste.

4.5.7) Paste into Folder

Perform Cut or Copy operations(Refer 4.4.4, 4.4.5, 4.5.4, and 4.5.5).

Navigate to the desired directory(Refer 4.2).

Touch and hold the desired folder for 3 seconds.

Touch File/Folder Editing options. Refer Fig 28.

5) Configuring Wi-fi

5.1) Selecting a Wi-fi Network

Touch Menu button on the home screen

Touch Settings

Fig 36

Touch Wi-Fi. (Fig 37)

Touch OFF to switch on Wi-Fi connectivity

Fig 38

Fig 39

The tablet will list all the available Wi-Fi connections.

Touch any one of the available Wi-Fi networks. (e.g. AAKASH)

Touch Connect

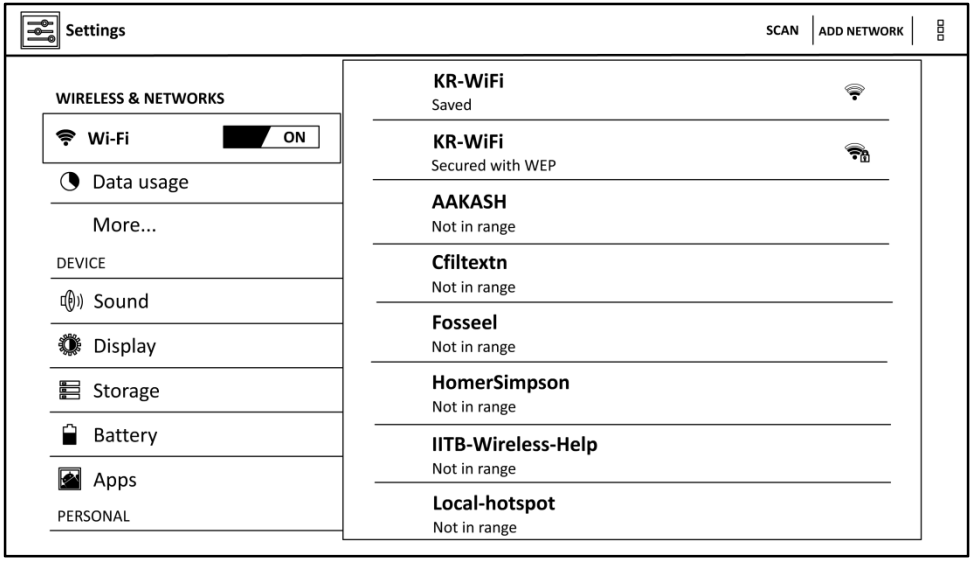


Fig 37

5.2) Adding a Wi-fi Network

Touch Wi-Fi settings (Refer 5.1)

Touch “ADD NETWORK” placed on top right corner of the tablet

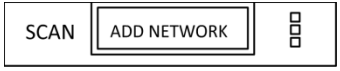


Fig 40

Provide details for configuring the Wi-Fi network. Input Network SSID.

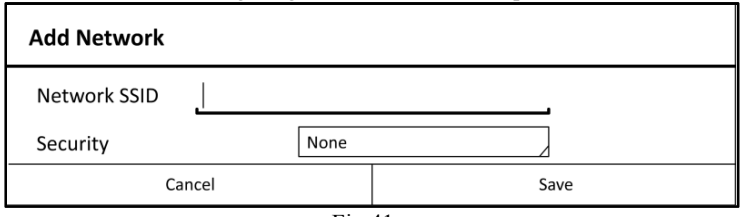


Fig 41

Touch appropriate security configurations of that network.

Touch Save to confirm, else touch Cancel.

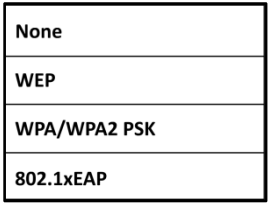


Fig 42

5.3) Removing a Wi-Fi Network

Touch Wi-Fi settings(Refer 5.1)

Touch and hold the desired Wi-Fi connection for 3 seconds.

Touch Forget network.

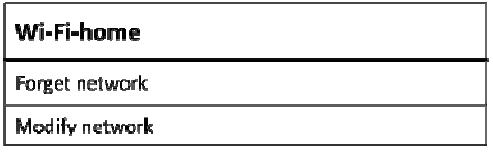


Fig 43

6) Aakash Applications

Apart from the standard applications available on Android, several educational applications and contents have been added by IIT Bombay.

Touch menu button on the home screen

Browse through the list of applications.

Touch Aakash Applications (Demonstration)

Fig 44

Applications developed at IIT Bombay will appear through their icons shown below.

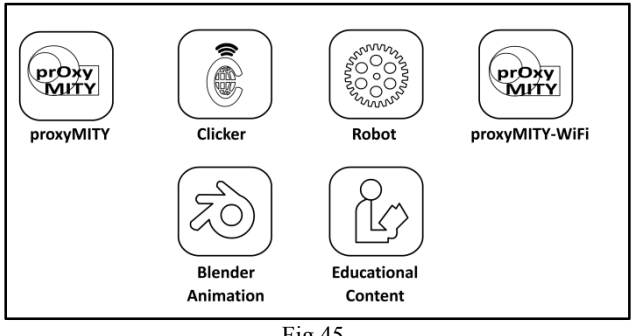


Fig 45

7) Aakash Programming Lab

Touch menu button on the home screen.

Browse through the list of installed applications.

Touch Aakash Programming Lab

Fig 46

A list of all applications installed under 'Aakash Programming Lab' is displayed, which is shown below.

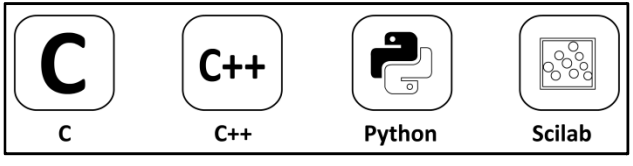


Fig 47

Notes(1)

Notes(2)