Module 1: Power in Your Hands
Lesson Plan of Module 1

1. Overview and introduction to digital devices
2. Know the computer (Components, Functions and Applications)
3. Introduction to mobile phones (Types, Components, Applications and Functions)
4. Similarities between a computer, mobile phone and tablet
Learning Outcomes for Module 1:

1. To understand in general what are digital devices
2. To understand how a computer works, what are its components, functions and uses
3. To understand what a mobile is, how does a mobile work, its components, functions and uses
4. Be able to understand the similarities between computers, mobile phones and tablets.
Introduction to Digital Devices

DIGITAL DEVICES

- Computer
- Mobile phone
- Tablet PC
How will I do so many things?

- Where is this place?
- When will the monsoon come?
- Railway or Bus ticket?
- 22+64=
- Aadhar card, Ration Card
- Job Search
- Shopping, Bill payment
Who can help him?

Hey there!

we can fix it
Know the Computer

INPUT

PROCESSING

OUTPUT

43, 56, 89, 90 (ADD)

43 + 56 + 89 + 90 = 278
Parts of a Computer

The computer has

- A desktop/monitor
- A Mouse
- A Keyboard

They are all connected to the CPU
Switching the Computer On

Press the power button on the CPU to start the computer
What is the mouse for?

A mouse is an input device and is one of the main ways of controlling a computer.

A mouse has a pointer in the form of an arrow; this is used to interact with the items on the screen.
How to hold a mouse?

For holding a mouse you have to place your hand on it. You have to use the index finger to click the left button and the middle finger to click the right button. The thumb is placed at the side.
How to use a mouse?

The mouse has two buttons and a scroll to move between documents quickly.
How to use a mouse?

The mouse is pointed towards the screen and whenever you move it, the pointer or cursor on the screen moves.

The cursor acts as a pointer and helps us to navigate.
How to use a mouse?

The mouse can be used to

• Select
• Open
• Move

• To Select press left click button
• To Open, click the left button twice
• To move select and drag. Hold it till you have positioned it as you want
• To move between pages use the scroll
What does a keyboard look like?
**How to use a keyboard?**

**Letter/Typewriter** keys are used to type the letters or words. **Number and Symbols** keys are used for numbers and symbols. **Caps lock** is used if you want to type capital letters. **Shift key** is used to type symbols on top of keys or for capital letters. **Space bar** is used to put a space in between two words. **Enter key** is used to finish the entry and ready for processing. **Backspace** is used to delete a word or a letter. **Tab key** helps put a bigger space.
A desktop is what appears on your screen when you switch on your computer.

There are various programs on the desktop such as:

- Web browser
- Files
- Documents
- Recycle Bin
- Music player
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- Web browser
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Descriptive Text:

The icon on the desktop represents a file or a program on the computer.

Using the mouse you can click and open any of the icons.

The task bar at the bottom shows you the programs that are open.
Different programs have different icons. By using the mouse you can click and open any of the folders or files and view the contents.
Desktop Icons

Title Bar: The title bar is on the top of the window and displays the name of the folder or file.

Menu Bar: The menu bar allows you to decide what to do with the folder.

Tool Bar: The tool bar has shortcuts to the options or commands in the menu bar.
Desktop Icons

There is an option to maximize, minimize or close the window available on the right hand side corner of the page.
Introduction to Mobile Phones

Microphone
Camera
Screen
Speakers
Uses of Mobile Phones

- Banking
- Camera
- Entertainment
- Video Calling
- Google Search
- Email
- News
- Uses of Mobile Phones
  - Google Search
  - Email
  - Camera
  - Banking
  - News
What are the types of mobile phones?

While there are different types of mobile phones, based on their functions and computing capability mobile phones can be briefly divided into smartphones and basic phones:

Basic Phones: Basic phones are a type of mobile phones that contain a fixed set of functions such as voice calling and text messaging and in addition might have multimedia and internet capabilities.

Smartphones: A smartphone is a mobile phone that is able to perform many of the functions of a computer. Smart Phones allow users to store information, e-mail, install programs, along with using a mobile phone in one device.
Using a Basic Mobile Phone

How to charge your mobile phone

Step 1: Connect the charger to an electric outlet on the wall

Step 2: Connect the charger to a phone

Step 3: The phone will start charging
Using a Basic Mobile Phone

How to lock and unlock the keypad?

Step 1: To prevent accidentally pressing a key, one should lock the keypad

Step 2: Use the selection key to press menu and then press *

Step 3: The keypad locks, to unlock the keypad repeat Step 1
Using a Basic Mobile Phone

Exploring Your Phone

Step 1: To see available functions press/touch Menu

Step 2: To go to a function press the Scroll Key to go left or right

Step 3: To select a function, press Select

Step 4: To select an item, press Select.

Step 5: To go back to the previous view, press Back.

Step 6: To return to the home screen, press 🔄.
Using a Basic Mobile Phone

How to make a phone call?

**Step 1:** Enter the phone number

**Step 2:** Press ✆

**Step 3:** To answer a call, press ✆

**Step 4:** To end a call, press ✆
Using a Basic Mobile Phone

How to change the ringtone of your phone?

**Step 1:** Press menu and select settings

**Step 2:** Select Tone Settings

**Step 3:** Select ringing tone
Using a Basic Mobile Phone

How to set an alarm?

**Step 1:** Press Menu, select Clock

**Step 2:** Select the option Alarm Time

**Step 3:** Press up and down to select the time

**Step 4:** To select the minutes, press up and down

**Step 5:** Press OK to set the alarm
Using a Basic Mobile Phone

How to send and receive an SMS?

Step 1: Go to Menu, press Messages

Step 2: Select Create Message

Step 3: Press the keys to write the message

Step 4: Press options and press Send

Step 5: Enter a phone number and press OK

Step 6: The message is sent
Using a Basic Mobile Phone

How to send and receive an SMS?

Step 7: For reading a message, press Show

Step 8: To view rest of the message, press down
Introduction to Smartphones

What is a Smartphone?

Also known as an intelligent phone because they resemble a cell phone but are more like a mobile personal computer.

Make use of ‘touch’ as an input to access or process information.

Regular cell phones offer texting and calling functionality, whereas smart phones offer a list of features including email, internet access, video chatting, games etc.

What are mobile apps?

'App' is short for ‘application’.

Apps are used to enhance functionality in a simple, more user-friendly way such as sending emails, listening to music, checking the weather, getting news etc.

Smartphones come with in-built apps, and specific apps can be downloaded online.
Using a Touch Screen

Open an application or other screen element: Tap the application or element.

Access functions quickly: Tap and hold the item. A pop-up menu with available options opens. For example, to send an image or delete an alarm, tap and hold the image or alarm, and from the pop-up menu, select the appropriate option. If you tap and hold the home screen, editing mode is activated.

Drag an item: Tap and hold the item, and slide your finger across the screen. The item follows your finger. You can drag items in the home screen or the main menu, when you have activated editing mode.

Swipe: Place a finger on the screen, and slide your finger in the desired direction.

For example, when you are viewing a picture, to view the next picture, swipe left.
Using a Touch Screen

Scroll in a list or menu: Place your finger on the screen, slide it quickly up or down the screen, then lift your finger. The content of the screen scrolls with the speed and direction it had at the moment of release. To select an item from a scrolling list and to stop the movement, tap the item.

Zoom out: Place two fingers on the item, and slide your fingers together. It is similar to making a pinching motion.

Zoom in: Place two fingers on the item and ‘pinch out’.
Explore the features of your phone

The Home Screen is where icons for apps/most frequently used functions is kept.

The home button 🏡 will take you back to the home screen. The back button will take you back to the previous screen.

Touch this icon to open the collection/drawer of apps.

Press the buttons on the bottom of your screen to control your phone.
### Explore the features of your phone

<table>
<thead>
<tr>
<th>App Symbol</th>
<th>App Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>§</td>
<td>Browse contacts</td>
<td>Click photographs from your phone</td>
</tr>
<tr>
<td>Phone</td>
<td>Make a call</td>
<td>Calendar for dates</td>
</tr>
<tr>
<td>Mail</td>
<td>Check emails</td>
<td>Photo album</td>
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<tr>
<td>Chat</td>
<td>Read and send texts</td>
<td>Downloads</td>
</tr>
<tr>
<td>Clock</td>
<td>Set an alarm</td>
<td>Calculator</td>
</tr>
<tr>
<td>Globe</td>
<td>Browse the web</td>
<td>Voice Search</td>
</tr>
</tbody>
</table>

**Primary app symbols used in smart phones**

A Smart Phone contains numerous applications which allow the users to carry out various activities on the phone. It also enables multi-tasking, as multiple activities such as email, web surfing and video chat can be done at one time on the same screen.
Explore the features of your phone

Phone Calls

Call a phone number
• On the home screen, select ☑️ and then type in the number.
• To delete a number, press ☐
• Press the call key. To end a call, press the end call key.

Call a contact
• Select ☑️
• To search for an icon, select ☑️ and enter the first few alphabets of their name.
• Select the contact’s name. Press ☑️

Add a contact to the contact list
• Select ☑️
• Select to New Contact
• Enter your contact’s first and last name in the appropriate area
• Tap ‘Save’ or ‘Add to Contacts’ button to save the information

Activate loudspeaker during a call
Activate the built in loudspeaker by clicking on ☑️
**Messaging**

You can send and receive various kinds of messages on Smart Phones:

- Text messages
- Audio messages
- Multimedia messages that contain pictures and videos
- Group messages

**Sending Texts**

- Select 📲
- To add the recipient’s name manually, enter the number in the to field and press ok.
- To select recipients from the contact list, select 📞
- Select the recipient from the contact list, write your message.
- Tap ‘Send’ to send your text message

**Read a received message**

- When you receive a message, you will see a 📩 symbol at the top of the phone.
- Select Show to view the message.

**Viewing a past message**

- Go to the home screen and select 📮
- Select ‘Inbox’ and click on the message you wish to read
Introduction to Tablets

What is a tablet?

Tablets are a type of internet-enabled computer that work in a similar way to smartphones. They are wireless and portable devices that make use of ‘touch’ as input to access or process information. Smaller than a computer and bigger than a Smartphone, the tablet is a portable device which can be carried around easily. Tablets can be broadly classified into two types— with call facility and without call facility.

What are the functions of a tablet?

Most common uses for tablets are the following:

- Reading e-books, newspapers and magazines
- Browsing the web
- Playing games
- Sending and receiving emails
- Watching videos, listening to music
- Some tablets can also work as phones
Computers, Mobile Phones and Tablets
Computers, Mobile Phones and Tablets

<table>
<thead>
<tr>
<th>Computers</th>
<th>SmartPhones</th>
<th>Tablet</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Computer" /></td>
<td><img src="image" alt="SmartPhone" /></td>
<td><img src="image" alt="Tablet" /></td>
</tr>
</tbody>
</table>

With time, the lines between computers, smart phones and tablets are getting blurred. While unlike smart phones and tablets, computers are not portable devices, all three can be used for direct communication. Following are some of the similarities between computers, smart phones and tablet.

**Communication:** Just like the initial purpose of a cell phone is communication, it is also possible to have live conversations on a PC and tablets through programs like Skype.

**Display:** All devices have illuminated screens which display digital information.

**Messaging:** It is possible to send text and video messages from both a cell phone, tablet and a PC.

**Internet:** Smart phones and tablets can be used like a computer due to their ability to surf the Web and use computer software.

**Entertainment:** All three can be used as entertainment devices and are capable of playing videos, music, games etc.

**Productivity:** Smartphone and tablet users can also perform advanced tasks such as write documents, read e-books, create spreadsheets and presentations that were earlier limited to computers using apps that enable one to do these tasks.
Additional Resources

www.wikipedia.org
www.webopedia.com
www.cellphones.about.com
www.techterms.com
Developed by NASSCOM Foundation

Contributed by Global Talent Track