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# Mini Laptop (Portable Hacking Machine)

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## 1. ABSTRACT :

This mini laptop has 2 GB RAM, Quad-core CPU, 4 USB Ports and One Ethernet port.this mini laptop is very useful for student and also different software working like Libre Office, ArduinoIDE,VLC etc...For the convenience of using and reading The Display of how to make a mini laptop was Choose to be 7 inches (IPS technology) HD display The 6000mah battery pack provides power to the Mini laptop. Once fully charged the mini laptop runsFor about 3 hrs. This means you can use the raspberry Pi for your future projects. Mini laptop main theme is for Kali Linux users to Linux project work with it. Its actual size is equalled to the present Mobile phone, CompatibleAnd a budget laptop. The Mini laptop works with Kali Linux OS, Linux users interact with their work in the mini laptop. the mini laptop works with Kali Linux OS, Linux users interact with their work in the mini laptop. Build a portable hacking machine with Kali Linux 2019.1 Kali-Pi on Raspberry Pi with the display.

## 2.Introduction:

A laptop is a small portable personal computer with a screen and an alphanumeric keyboard. As the personal computer became feasible in 1971. the idea of a portable personal computer soon followed. Laptops combine all the input/output components and capabilities of a desktop computer, including the display screen, small speakers, a keyboard, data storage device, sometimes an optical disk drive, pointing devices (such as a touchpad or trackpad), with an OS, a processor and memory into a single unit. Most modern laptops feature integrated webcam and built-in microphones, while many also have touchscreen Laptops can be powered either from an internal battery or by an external power supply from an AC adapter **.**it has been installed Kali Linux is a Debian-derived Linux distribution and a member

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of UNIX OS Family. Maintained and funded by Offensive Security Limited. Primarily designed for Penetration Testing and Digital Forensics. Developed by Mati Aharoni and Devon Kearns of Offensive Security. This is an open-source platform. It has a monolithic type kernel. Available in 32 bit and 64-bit images for use on hosts based on the x-86 instructions set. Also available as an image for ARM architecture for use on Raspberry Pi and Samsung ARM Chromebook. It has more than 300 penetration testing tools. Multilingual support and Completely Customizable. it has vast Wireless device support and compatible with USB and GPG signed packages and repos.

**3.Existing system:**

A computer system is a set of integrated devices that input, output, process, and store data and information. Computer systems are currently built around at least one digital processing device. There are five main hardware components in a computer system input, processing, storage, output and communication devices.

**4.Proposed system :**

The new way of using the Raspberry pi module into kali Linux user. By using the Kali Linux OS to operate the raspberry pi module. It is a compatible design to use as the mobile dimensions. To make this project we first design, 11X17 cm box. We can also use 3D Printed case for this laptop, all component must be adjusted in this box. Place the Raspberry Pi in the box and power bank to be a side of the box. The laptop display will be screen I opted for was a 7 inch IPS technology HD display. This Display was extremely thin and suited for the box.

**4.1 Power supply:**

The Power bank will be chosen for more backup power. Pass-Through Charging(PTC) means that we should be able to simultaneously charge and use the laptop at the same time. we should take 6000mah power bank and the open bottom case of this power bank. Then we apply some glue to the box and stick the power bank to the box. Then take a Soldering iron and soldering two-wire to the negative and positive pole. Then close this case as per the picture.After closing, we need to joint male USB pin to this + & - wire one on/off switch.

**4.2 OPERATING SYSTEM:**

Choosing the operating system depends on the type of work we do. I wanted the functions of a desktop so I went with Raspbian Pi OS. There are a few others to be considered:

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**Raspbian:** Raspberry Pi OS is a Debian- based Operating system for Raspberry Pi. Since 2015, it has been officially provided by the Raspberry Pi Foundation as the primary operating systems for the Raspberry Pi family of compact single-board computers.

**Ubuntu Mate:** Ubuntu Mate is a free and open-source Linux distribution and an official derivative of Ubuntu. It is a stable, easy-to-use operating system with a configurable desktop environment. It is ideal for those who want the most out of their computers and prefer a traditional desktop metaphor.

**Linux Mint:** Linux mint has been hailed by many as the better operating system to use when compared to its parent distro and has also managed to maintain its position on distrowatch as the OS with the 3rd most popular hits in the past 1 year.

**4.3 Installing the operating system:**

Once you are decided on the operating system you want to go with, time to install it on the raspberry pi 3. Raspberry pi 3 B+ boots from the SD card. So we have to get the image onto the SD card. The recommendation of the size of the SD card depends on the operating system we install. We used a 16 GB class 10 micro SD card. Class 10 cards are faster to boot and perform read-write operations.

Writing the IMAGE of the OS to the SD card is done by Burning the image file using WIN32Disc imager

1.Using the SD formatter tool format SD card.

2.Open the Win32 Disk Imager and locate the image you downloaded. Click on “Write” once ready.

3.Wait for the writer to complete.

4.Once the writing is finished, safely eject the SD card from the computer.

5.If you followed the steps correctly the raspberry pi should Boot Successfully with the OS.

**4.4 Component Working :**

1.First of all take Raspberry pi 3 B+ and take Display adapter to joint with raspberry pi

2. Then take a 7-inch display and joint with the other end of the display adapter.

3.Insert Raspbian OS imager 16 GB Memory Card inside slot of the memory card of Raspbian pi 3 B+

4. Then connect 6000mah Power supply to Raspberry pi 3 B+.

5.Switch ON and see Yellow light glow upon Raspberry pi 3 B+ and 7 “ led display start or not?

6. If Working well then go to the next step and continue the

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**4.5 Hacking Gadgets:**

A hacking tool is a program designed to assist a hacker with hacking. It can also be proactively utilized to protect a network or computer from hackers. Hacking is an intentional modification of computer software or hardware that is outside the architectural perimeter and design.

1.**LAN Turtle:** This type of systems admin and pen-test tool provides stealthy remote access, as it stays connected to a USB port covertly. Besides this, it allows users to harvest information from the network and can execute a man-in-the-middle attack.

**2.Ubertooth one:**

This device is an open-source 2.4 GHZ code development platform for experimenting with Bluetooth, enabling users to appreciate the different aspects of new wireless technologies.

3.**Keylogger** :

An old classic for logging keystrokes. This device can be connected via USB and creates a stealthy connection between the keyboard and PC, logging every keystroke. Of Course, it tends to go undetected by most security systems.

**4.6 Software requirements:**

1.Linux OS

2.Raspberry Pi OS.

3.Ubuntu mate

4.Linux mate

**4.7 Hardware requirements:**

1.Raspberry pi module

2. 7 inch LCD Touch Screen

3. Memory Card 32 GB

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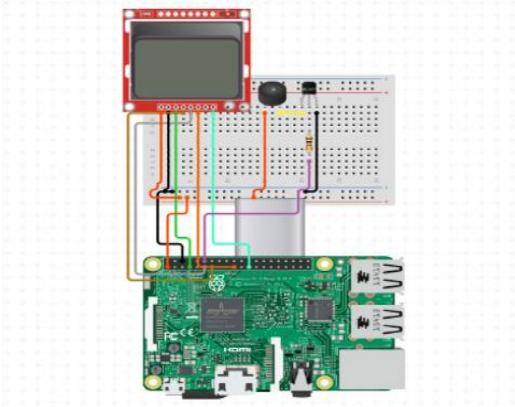
4. Power Supply Adapter For Raspberry Pi

5.Bluetooth keyboard

6.WIFI Adapter

**5.Ciruct diagram:**



**6. Result:**

The Raspberry pi 3 B+ will be successfully installed Raspbian OS and displayed the output of the operating system. The Mini Laptop can be use the several programs based on the work.

**7. Conculsion :**

Finally, the mini portable laptop to the advantage of using it in travelling and outdoor usage. It will give you a new experience with Kali Linux OS.It is fully usable and works as a small laptop. Raspberry pi should Boot successfully with the OS if all step is correct.

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