

Pocket Laptop using Raspberry PI

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Abstract: *Raspberry Pi, an efficient and cost-effective credit card sized computer comes under light of sun by United Kingdom-Raspberry Pi foundation with the aim to enlighten and empower computer science teaching in schools and other developing countries. Since its inception, various open-source communities have contributed tons towards open-source apps, operating systems and various other small form factor computers similar to Raspberry Pi. Till date, researchers, hobbyists and other embedded systems enthusiasts across the planet are making amazing projects using Pi which looks unbelievable and have out-of-the-box implementation. Raspberry Pi since its launch is regularly under constant development cum improvement both in terms of hardware and software which in-turn making Pi a " Full Fledged Computer " with possibility to be considered for almost all computing intensive tasks. The aim of this research paper is to enlighten regarding what is Raspberry Pi, Why Raspberry Pi is Required, Generations of Raspberry Pi, operating systems available till date in Pi and other hardware available for project development. This paper will lay foundation for various open-source communities across planet to become aware and use this credit card sized computer for making projects ranging from day-to-day activities to scientific and complex applications development.*

the Internet of Things – IoT, can be looked as a highly dynamic and radically distributed networked system. The presence of smart devices able to sense physical phenomena and translate them into a stream of information data, as well as the presence of devices able to trigger actions, maximizes safety, security, comfort, convenience and energy-savings. The Raspberry Pi brings the advantages of a PC to the domain of sensor network, what makes it the perfect platform for interfacing with wide variety of external peripherals. The main purpose of this paper is to introduce an all-in-one and portable computational device. This computer is approximately 40% smaller than the laptop. This computer has complete and easy functionality as it contains the key components like a battery pack, a working motherboard, a display unit, a wireless keyboard and lastly a sleek case, all the components are assembled together.

Keywords: Raspberry, 7 inch IPS display, battery pack, wireless keyboard with inbuilt mouse

