./

Report – Base Converter

Course Code: <CODE>



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**Document History**

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# PROJECT: Base Converter

## Introduction

We communicate with each other in a ***particular language*** that is made of ***letters or words.*** We normally type letters or words through keyboard of the computer, but computer does not understand the words and letters. Rather, those words and letters are translated into numbers. This means that computers understand only numbers. We know the **decimal (base 10)**system, and are very comfortable with performing operations using this system, it is also important for us to understand that the decimal system is not the only system in the world. By studying other number systems such as **binary (base 2), quaternary (base 4), octal (base 8), hexadecimal (base 16)**and **so forth,**we **will gain a better understanding** of **how number systems work in general. Number systems** are the technique to represent numbers in the computer system architecture, every value that you are saving or getting into/from computer memory has a defined number system. As Computer architecture supports following number systems so we need to study them and also need to know the ***conversion technique between them. This is an application for various base conversions.***

## Requirement

|  |  |
| --- | --- |
| ID | Description |
|  | Allow the entry of basic number system and charactersOpens conversation pageAsk which conversion requiredSpace to enter the value to be converted  * Conversion from binary to decimal * Conversion from decimal to binary * Conversion from octal to decimal * Conversion from decimal to octal * Conversion from decimal to hexadecimal * Conversion from binary to octal * Displays the converted value * Ask for next conversion |

## Design

UML diagram:

Use case diagram:

