**Research and Aging**

* **Unit Converter**

Conversion of units is the conversion between different units for measurement for the same quantity, typically through multiplicative conversion factors.

The process of conversion depends on the specific situation and the intended purpose.

Engineering judgment for such conversions may include such factors as:

* The precision and accuracy of measurement and the associated uncertainty of the measurement.
* The statistical tolerance level of the initial measurement.
* The number of significant figures of the measurement.
* The intended use of the measurement including the engineering tolerances.
* Historical definitions of the units and their derivatives used in old measurements.
* **Calculator**

The first solid-state calculator was created in the early 1960s. Pocket-sized devices became available in the 1970s.

Modern electronic calculators vary from cheap, give-away, credit-card sized models to sturdy desktop models with built-in printers. They became popular in the mid-1970s as the incorporation of integrated circuits reduced their size and cost.

By the end of that decade, prices had dropped to the point where a basic calculator was affordable to most and they became common in schools.

In addition to general purpose calculators, there are those designed for specific markets. For example, there are scientific calculator which include trigonometric and statistical calculations.

In 1986, calculators still represented an estimated 41% of the world's general-purpose hardware capacity to compute information. By 2007, this had diminished to less than 0.05%.

* **Roman Numerals**

Roman numerals originated, as the name might suggest, in ancient Rome. There are seven basic symbols: I, V, X, L, C, D and M.

Numbers are formed by combining various letters and finding the sum of those values.

There are numerous other rules related to Roman numerals. For example, do not use the same symbol more than three times in a row.

Roman numerals are not without flaws. For example, there is no symbol for zero, and there is no way to calculate fractions. This hindered the ability to develop a universally understood, sophisticated math system, and made trading more difficult.

Today, roman numerals are used in astronomy to designate moons and in chemistry to denote groups of the Periodic Table. They can be seen in tables of contents and in manuscript outlines, as upper- and lower-case Roman numerals break information into an easily organized structure. Music theory employs Roman numerals in notation symbols.

**Requirements**

**High Level Requirement**

|  |  |
| --- | --- |
| ID | Description |
| 1. HL01 | Navigation bar containing Menu |
| 2. HL02 | Calculator Fragment |
| 3. HL03 | Unit Converter Fragment. |
| 4. HL04 | Roman Converter |

**Low Level Requirement**

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| ID | Description |
| 1. LL01 | Menu containing calculator, Unit, roman converter logo and name. |
| 2. LL02 | Menu color should be green and white |
| 3. LL03 | Calculator Fragment background color black, sound on click of button. |
| 4. LL04 | Multiplication, Addition, Subtraction, Division, Clear, percentile operations. |
| 5. LL05 | Unit Converter should contain Currency, Temperature and Length conversion. |
| 6. LL06 | Unit Converter Fragment should contain #LL05 Conversion Logo |
| 7. LL07 | #LL06 conversion categories should be in Green background. |
| 8. LL08 | Roman Converter should contain roman to Decimal and Vice Versa conversion. |
| 9. LL09 | #LL08 background should be in green background |
| 10. LL10 | Fragment Header should be in purple along with menu icon. |