REQUIREMENT IDENTIFICATION

Requirement for the software application were that it must be able to estimate the building material ie. gravel, cement, no. of blocks and steel bars. for a building taking in the dimensions of the building to constructed.

REQUIREMENT GATHERING

Requirements were gathered using a questionnaire answered by the field workers and professional builders on different construction sites.

Questions included in the questionnaire were

- Length and breadth of of the building to be built ?
- Height of floor ?
- Depth of foundation ?
- No of floors ?

REQUIREMENT ANALYSIS AND FORMULATION

On the analysis of the gathered information it was formulated that,

- floorMaterial = noOfFloors * (floorHeight * 1 / 2 * unit * plotBreadth * plotLength);
- baseMaterial = baseHeight * 2 * unit * plotBreadth * plotLength

Where unit is the material required for a unit build ie. for 1*1*1 dimension. And found to be

- 2 for cement
- 3 for steel
- 5 for gravel
- 7 for blocks

UML DIAGRAM

Login

+Login()
-loginPanel1_Load():void

MainForm

-bunifuCustom(): void

LoginPanel

-plotLength: int
-plotBreadth: int
-noOfFloors:int
-floorHeight: int
-baseHeight: int
-baseMaterial: int
-floorMaterial: int
+a: int
+b: int
+c: int
+d: int

+LoginPanel()
-bunifuFlat(): void
-IDTextBox.KeyPress(): void
BreadthTextBox(): void
-timer5_Tick(): void
+calculation(int unit): int

DriverClass

+Main(args): void