UNIVERSITY OF
KARACHI

PROJECT REPORT

Construction Material Estimator

Project Report

Objective

This application calculates estimated amount of material i.e. barring, gravel, cement etc. required to build a house of user given dimensions i.e. floor height, number of floors, plot dimension etc.

Techniques, Methodology

1. Methodology used: Agile Development (Iterative)

2. Techniques Used: Extreme Programming

Evaluation and Results

1. Evaluation Technique: Process Evaluation

2. Evaluation Scope: End-user

Resources Used

1. Language

   o C#

2. Complier

   o Visual Studio 2017

3. Plugins

   o Bunifu Framework

4. Algorithm
   This algorithm is constructed by thorough research in the field of construction, by studying what main materials are used in the construction of a house and in what quantities are they used for a particular dimension of building structure.

How does this software work

This software works when user inputs following facts about the structure to be built

- Plot Dimensions (Length and Breadth)
- Height of Walls

- Height of Base
- Floors

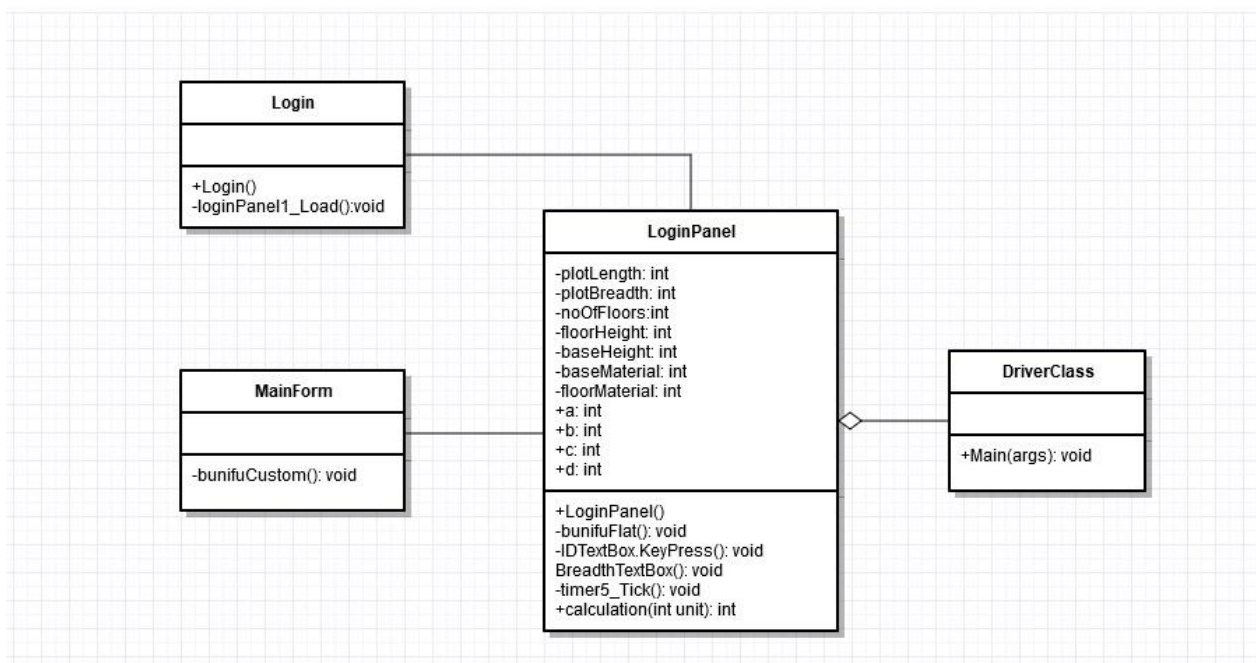Then it calculates and gives the collective answer of how much barring, gravel, cement and blocks should be used.

Other Names in this field
To our knowledge this software is first of its kind and no work is done in this particular field

Future Objectives
- We plan to take this application on other platforms like android, ios and web.

- Make constant betterment in its algorithms and data structures.

UML Diagram

Team Members
- Nabeel Ahmed Khan B16158069

- Talha Ahmed Hamedi B16158099