Thesis Title

Database System Development for Cost Appraisement of High-Rise

Building: Office and Residential Buildings

Thesis Credits

12

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Abstract

This thesis deals with the study of construction cost of high-rise buildings which comprise of the office and residential (condominium) buildings. The construction costs of structural, architectural and system work were collected from the blue prints and systematically analyzed in order that they could be used as the database. The database system was developed on the Microsoft Access and run on the Microsoft Windows. The main features of the database system allowed the user to add new data as well as to update the existing data by means of the indices of construction materials and labor cost. Standard form was developed for helping the users to select price level and fill an essential information. Then, used it to estimate the building cost with the database obtained in the computer. The accuracy of the result depended on the details of the collected data and the knowledge of the user.

The database system was tested by using the buildings of both office and condominium. It was found that the cost appraisement from the database system differed from the actual cost within \pm 5.6 and \pm 12.5 percents for office and condominium buildings, respectively. In addition, the costs of furniture and appliance were also studied and the standard form was developed. The database of this work helped the user to estimate the cost of furniture and appliance with more accuracy.

Keywords: Database System / Cost Appraisement / High-Rise Building /

Condominium / Office Building / Structural / Architectural / System Work