

# **GRAPHICAL USER INTERFACE BUILDER FOR C LANGUAGE**

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## **Abstract**

C language was originally developed in 1972 by Dennis Ritchie at Bell Laboratories. It is a programming language that derived from earlier language B and B's earlier ancestors BCPL and CPL. In a very short period of time C language became more powerful and flexible. The UNIX operating system was originally written in assembly language and then it was almost immediately re-written in C. During the rest of the 1970's, many colleges and universities were adapted C language because of its close ties to UNIX and the availability of C compilers.

Though the c language found lasting use in applications, there is no specifically made RAD tool (only available one is "Glade" but it not specifically made for C language) that enable quick & easy development of user interfaces. Therefore most C programmers use GTK widgets to design graphical user interfaces using GTK widgets. This dissertation discusses about a RAD tool that provide programmers quick & easy development of user interfaces. Main objectives of this RAD tool is to provide a user friendly interface to design the graphical user interfaces, facility to preview the designed user interfaces and generate a C file to perform enhancement to the source code using code block or any other supported tool.

First step of the procedure was to design an interface for the GUI builder. The interface was designed using java with eclipse environment. Then create an Editing area for design the graphical user interfaces to create windows forms, Insert buttons, labels, menus...etc with drag and drop facility. Next step was to read the attributes of the components when they are in their final positioning and then use file handling to create the C file using properties of above attributes. And compile the C file using GCC compiler and show the preview. Then as the final output, provide the GTK+ source code.

This dissertation showed that implemented RAD tool will enable quick & easy development of user interfaces for C language.