DAY-6

I started studying GTK but there's not many resources available on YouTube, so I decided to go with official documentation. While learning the first hello world app in GTK, I got to know about more C concepts which I mentioned below.

Static Void in C

Static Void is a method of creating functions in C where void means this function will return nothing and static means it is only accessible privately by the current file. Not the other files from the project could use this function. It helps in maintaining the privacy of some code blocks and prevents name conflicts in larger projects.

For example -

```
static void print_hello(){
    printf("Hello World");
}
```

Let's continue to learn GTK.

Named my OS and its components today officially.

OS – mausOS

DE – NiUI

init system – RITinit

I learnt to create my first basic hello world program in GTK with C. I'll be attaching a screenshot here but I don't think I should waste my time on code explanation as I've already made the notes in my notebook.

```c
#include <gtk/gtk.h>

static void print_hello(GtkWidget *widget, gpointer data){
    g_print("Hello World\n");      You, 14 hours ago • First hello world app …
}

static void activate(GtkApplication *app, gpointer user_data){

    GtkWidget *window;
    GtkWidget *button;

    window = gtk_application_window_new(app);
    gtk_window_set_title(GTK_WINDOW(window), "Hello");
    gtk_window_set_default_size(GTK_WINDOW(window), 200, 200);

    button = gtk_button_new_with_label("Hello World");
    g_signal_connect(button, "clicked", G_CALLBACK(print_hello), NULL);
    gtk_container_add(GTK_CONTAINER(window), button);

    gtk_widget_show_all(window);
}

int main(int argc, char **argv){

    GtkApplication *app;
    int status;

    app = gtk_application_new("org.gtk.example", G_APPLICATION_DEFAULT_FLAGS);
    g_signal_connect(app, "activate", G_CALLBACK(activate), NULL);
    status = g_application_run(G_APPLICATION(app), argc, argv);
    g_object_unref(app);

    return status;
}
```

This creates a basic window with the title" Hello". And in that window, we have a button with label" Hello World" which prints" Hello World" in the terminal.

And for compiling, we run the following command in the terminal.
gcc myapp.c -o myapp `pkg-config --cflags --libs gtk+-3.0`

I Kept practicing this same code again and again so I get comfortable with it and can build logic in more detail.