```
IDE {
For
        Beginners }
```

# </ Backlog

### Presentation

Our app is an easy-to-use, beginner-friendly IDE tailored for writing, running, editing C/C++ files.

Our app has an intuitive design, a lot of interesting features which improve your quality-of-life.

## Story

Our app is targeted to new coders, who want to explore the world of programming through a fun and engaging environment. Our app actually makes C++ fun!

#### **Features**

Our app merges the best part of what you find in other IDEs, for a smoother and easier coding session! You can write code, edit files, run your code in C/C++, use an AI tool, autocomplete functions and many more!



## </ User Stories

We want our users to be able to:

- 1. Use our app easily
- 2. Be able to open, create, save files and folders
- 3. Write and edit text
- 4. Change the formatting of the text
- 5. Have syntax and error highlighting
- 6. Use an AI chatbot for improving code
- 7. Run and compile C/C++ code
- 8. Customize the editor
- 9. Open a terminal
- 10. Use already written frequent functions (QuickSort, Binary Search, DFS etc.)





# Architecture

In the process of developing our app, we used:

- → PYTHON 3.12.2
- → LLVM Compiler Infrastructure
  - For Clang, Clangd
- Language Server Protocols
  - For autocomplete, syntax errors etc.
- → PyQt5 Framework
  - For the overall implementation of the app





# </ Interesting Aspects</pre>

## Already Written Functions

Our app offers our users the ability to use pre-written (by experienced programmers!) frequently-used functions and data types - like Binary Search, Stacks, DFS.

## Funky Syntax Highlighting

Done with RegEx, our syntax highlighting is fun and visible and we plan on making it fully customizable.

## Intuitive File System

Our users can open folders and files in multiple tabs.

### Autocomplete

Written through a series of notifications sent from and to the Language Server, which are then interpreted.

# </ Difficulties



## File System

The difficulty laid in the synchronisation of the files - we had to verify their saved state, select their path, matching the methods among them.

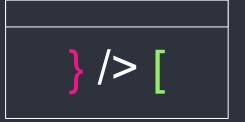


## LSP Integration

The difficulty laid in researching the best way to implement these features and in synchronising the notifications with the app.

## </ What's left?</pre>

- → AI Chatbot Implementation
- → Design Implementation
- → Bug Fixing
- → Automatic Tests
- → Customizability



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Pitch Deck 20xx

