

```
!!! info inline end ""
```

```
!!! danger ""
```

```
    **Programming Language:** C
    **Version Control:** Git
    **Build System:** GNU Make
    **AST VISUALIZER:** Graphviz
```

Tech Stack

```
!!! warning ""
```

Other than the above mentioned tools, we have also used libraries like NCurses to build the UI.

Project Structure

```
VIREX
├─ build/
├─ docs/                # Reference
documentation
├─ examples/           # Sample programs
├─ extras/
│   └─ orin_grammar.txt # Grammer for ORIN
(PROTOTYPE)
├─ html/               # Latest Build of the
documentation website
├─ include/            # Public headers for VM,
SASM, OCC
├─ install.sh          # Install script for
linux
├─ LICENSE              # GPL-3
├─ Makefile             # RULES: virex, sasm,
occ, html, clean
├─ mkdocs.yml
├─ README.md
├─ requirements.txt     # requirements for
mkdocs
├─ src/                 # Core implementation
(VM, assembler, compiler)
├─ tests/               # Simple Test programs
written in SASM
└─ tools/
    └─ fonts/
        └─ EnvvyCoder/  # font used when
building TUI
    └─ themes/
```

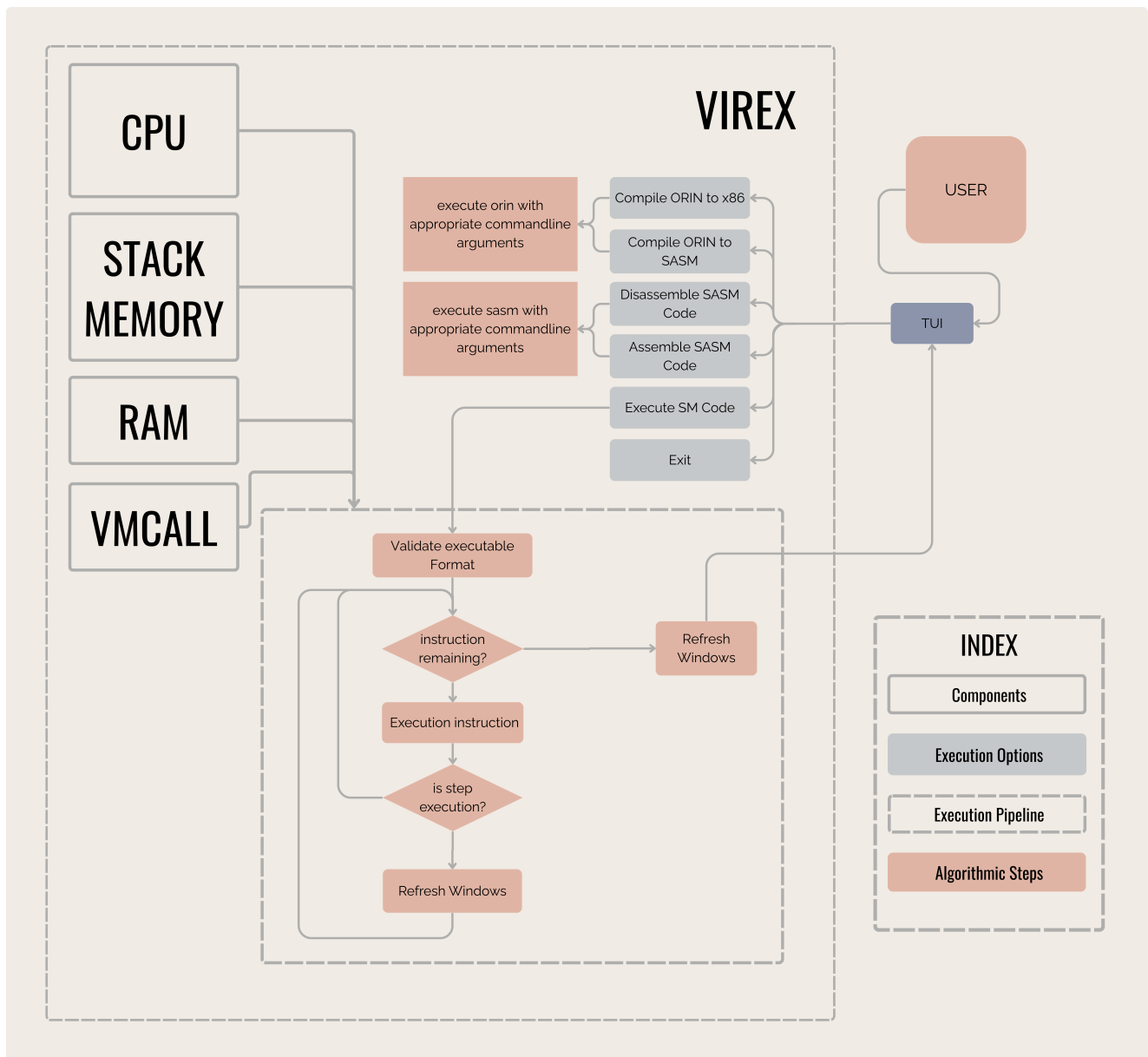
```

└─ kitty/                                     # kitty terminal conf
used when building TUI
└─ vs_code/
    └─ sasm_syntax_highlight/                 # VS Code syntax
highlighter

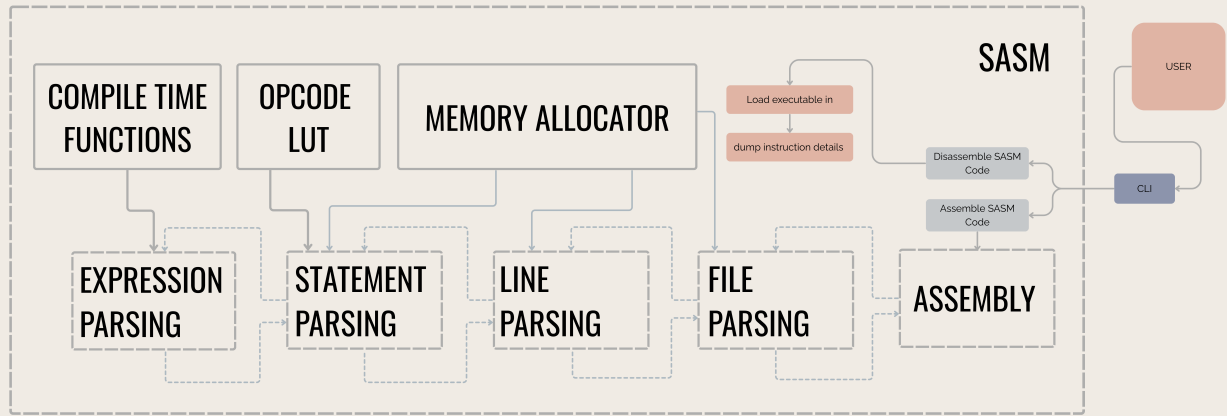
```

Architecture

VIREX



SASM



Individual Components of SASM

