Tech Stack

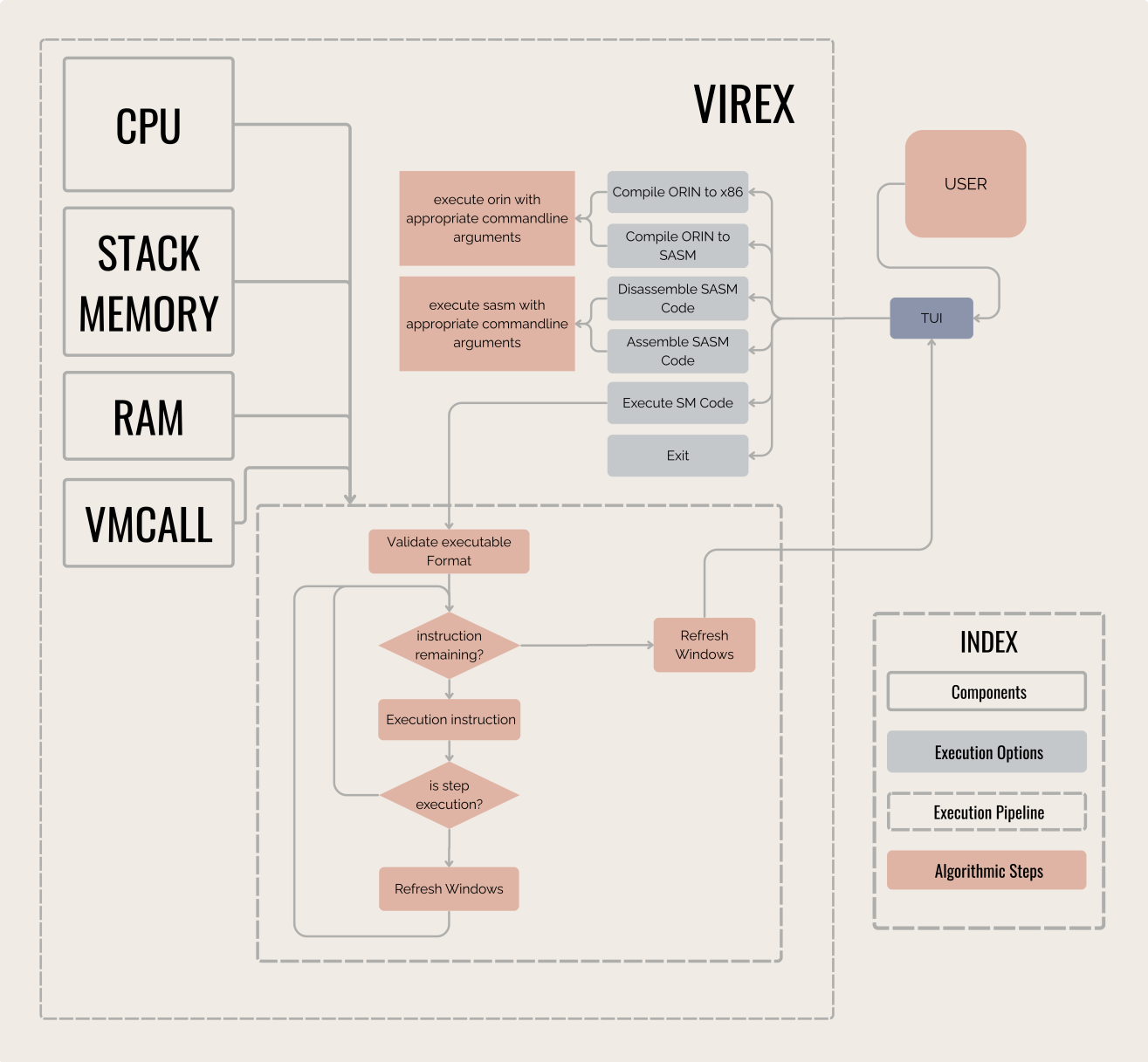
- **Programming Language:** C
- **Version Control:** Git
- **Build System:** GNU Make
- **AST VISUALIZER:** Graphviz

📦 Project Structure

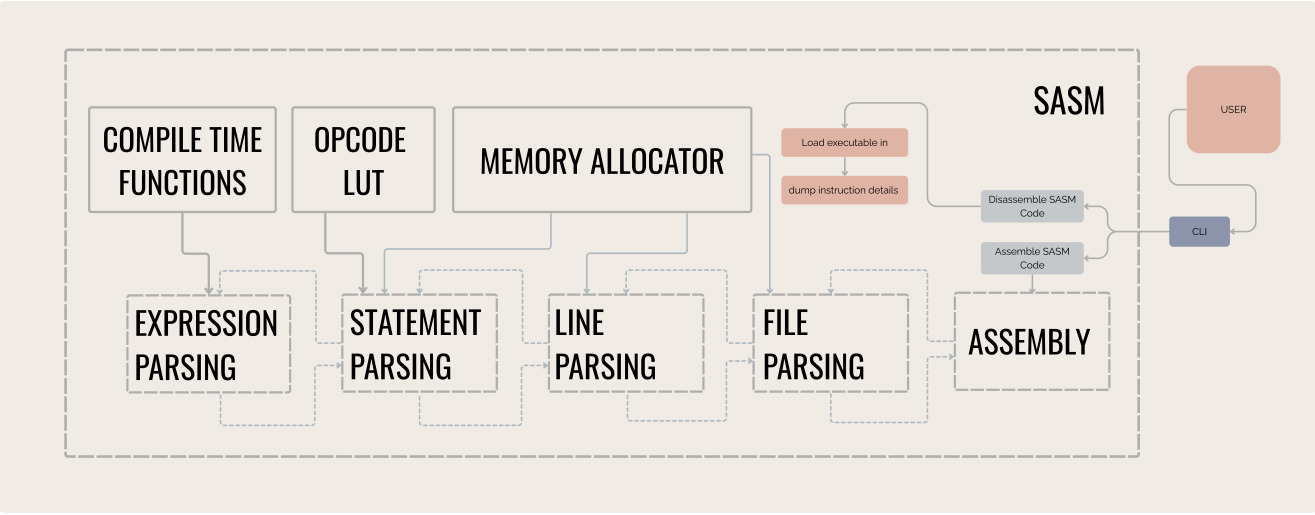
```
/docs/                    # Reference documentation
/examples/                # Sample programs
/include/                 # Public headers for VM, SASM, OCC
/src/                     # Core implementation (VM, assembler,
compiler)
/tests/                   # Simple Test programs written in SASM
/tools/themes/vs_code/    # VS Code syntax highlighter
/install.sh               # Install script for linux
```

Architecture

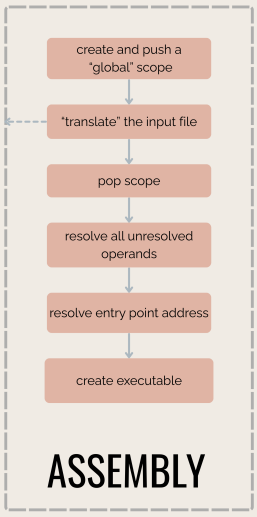
VIREX



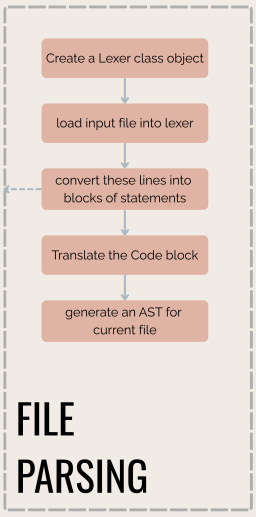
SASM



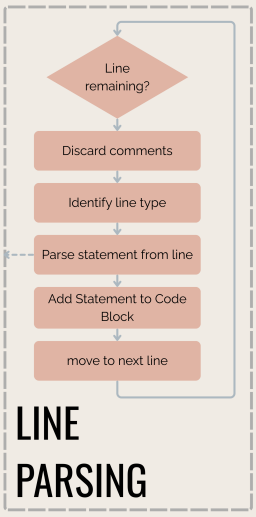
Individual Components of SASM



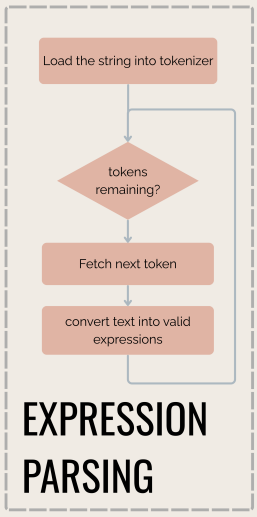
(a) Assembly Pipeline



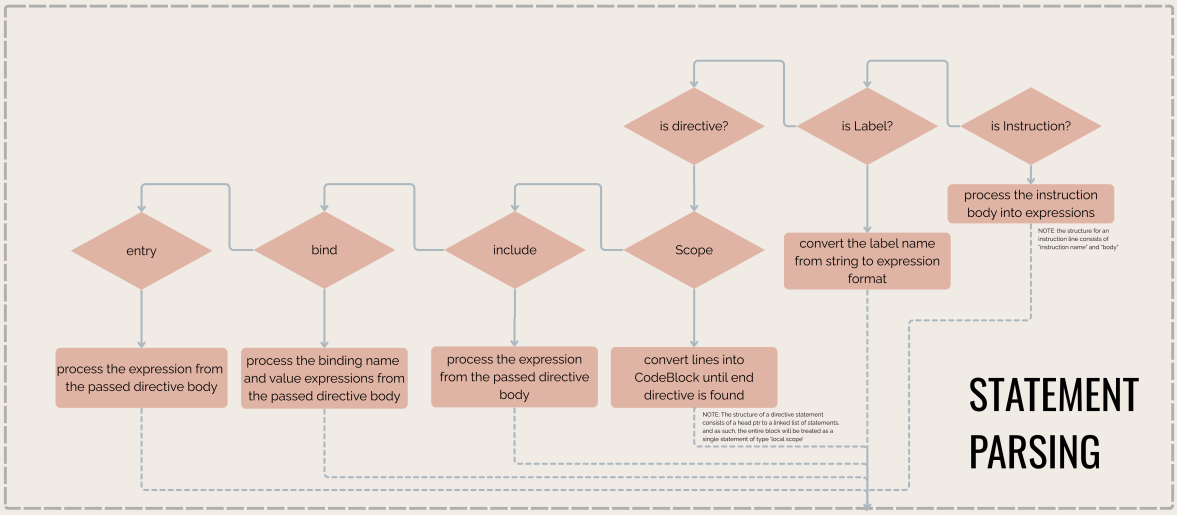
(b) File Parsing



(c) Line Parsing



(e) Expression Parsing



(d) Statement Parsing