

!!! info inline end ""

```
![Image](assets/credits.png)<br>
Active Maintainers/Creators
!!! warning ""
```

The project is maintained by two core developers who each own a unique layer of the system.

=== "Soham Metha"



{ width="120px"

style="border-radius: 50%;padding: 4px;" }

```
> **Role**: Lead Developer <br>
> **Modules Owned**: VIREX VM, SASM Assembler, VS Code Extension, Docs
```

!!! tip "info"

- Designed the **VIREX** Virtual Machine architecture.
- Developed the **SASM Assembler** and complete instruction set.
- Built tooling: AST visualizer, debug tools, and VS Code syntax extension.
- Authored all core documentation.
- Maintains the monorepo, versioning, and long-term roadmap.

!!! quote

"VIREX is a hands-on way to explore systems programming, not just study it."

[]
(https://en.wikipedia.org/wiki/C_(programming_language)) []() []()

!!! quote ""

=== "Omkar Jagtap"



{width="120px" style="border-radius: 50%;"}</p>
</div>
<div data-bbox="110 381 732 431" data-label="Text">
<p>> **Role**: Compiler Engineer - ORIN

> **Modules Owned**: ORIN Compiler (WIP), Custom Hashtable Implementation</p>
</div>
<div data-bbox="112 448 264 465" data-label="Text">
<p>!!! tip "info"</p>
</div>
<div data-bbox="110 482 886 583" data-label="Text">
<p>- Designing and implementing **ORIN**, the high-level language compiler targeting SASM

- Handles the full compilation pipeline: parsing, IR generation, and SASM output

- Exploring advanced features like expression optimization and static analysis</p>
</div>
<div data-bbox="112 601 214 617" data-label="Text">
<p>!!! quote</p>
</div>
<div data-bbox="110 634 886 666" data-label="Text">
<p>*"ORIN aims to make high-level programming compatible with low-level control."*</p>
</div>
<div data-bbox="111 685 762 752" data-label="Text">
<p>[]
(https://en.wikipedia.org/wiki/C_(programming_language)) []() []()</p>
</div>
<div data-bbox="112 769 243 786" data-label="Text">
<p>!!! quote ""</p>
</div>
<div data-bbox="81 821 238 838" data-label="Text">
<p>!!! info inline end ""</p>
</div>
<div data-bbox="112 873 253 890" data-label="Text">
<p>!!! danger ""</p>
</div>
<div data-bbox="154 905 763 924" data-label="Text">
<p>[Soham-Metha/virex](https://github.com/Soham-Metha/virex)</p>
</div>

```
<br>[GitHub Issues](https://github.com/Soham-Metha/virex/issues)
<br>[GitHub Discussions](https://github.com/Soham-Metha/virex/discussions)
<br>[CONTRIBUTING.md](../CONTRIBUTING.md)
<br>[roadmap](roadmap.md)
👉 Contact & Community
!!! warning ""
```

Use the links above to explore the repository, report issues, join discussions, contribute, or follow the project's development roadmap.

🙏 Acknowledgments

We gratefully acknowledge the creators and communities that inspired and supported this project:

??? info "**Educational Inspiration**"

```
[Tsoding](https://www.youtube.com/playlist?list=PLpM-Dvs8t0VY73ytTCQqvgCWttV3m8LM), [Dr. Jonas Birch]
(https://www.youtube.com/@dr-Jonas-Birch), [Low Byte Productions]
(https://www.youtube.com/playlist?list=PLP29wDx6QmW5DdwpdWHCRJsEubS5NrQ9b), [Cobb Coding]
(https://www.youtube.com/playlist?list=PLRnI_2_ZWhCxCxHQ_3zDfW0-RgiWo8ftyj) for their deep dives into compilers, virtual machines, and systems programming.
```

- **Ecosystem & Tools:**

The open-source communities around the **JVM**, and **language tooling** landscape, for providing extensible blueprints and motivation.

- **Early Support:**

Friends, testers, and curious peers who gave feedback during the early stages of development.

VIREX is open. Hackable. Minimal. Built for builders.