!!! 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"

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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."* <br>

[![](https://img.shields.io/badge/Language-C-blue)]
(https://en.wikipedia.org/wiki/C_(programming_language)) [![]
(https://img.shields.io/badge/Project-VIREX-success)]() [![]
(https://img.shields.io/badge/Project-SASM-success)]()

!!! quote ""
```

"Omkar Jagtap"

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```
> **Role**: Compiler Engineer – ORIN <br>
> **Modules Owned**: ORIN Compiler (WIP), Custom Hashtable
Implementation

!!! tip "info"

    - 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

!!! quote

    > *"ORIN aims to make high-level programming compatible with low-
level control."*

[![](https://img.shields.io/badge/Language-C-blue)]
(https://en.wikipedia.org/wiki/C_(programming_language)) [![]
(https://img.shields.io/badge/Project-ORIN-orange)]() [![]
(https://img.shields.io/badge/Target-SASM-lightgrey)]()

!!! quote ""
```

!!! info inline end ""

```
    🤝 Contact & Community
!!! warning ""
!!! danger ""
```

```
    [Soham-Metha/virex](https://github.com/Soham-Metha/virex)
    <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)


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:

- **Educational Inspiration**:
  Tsoding, Dr. Jonas Birch, Low Byte Productions, Cobb Coding 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.