

Engagement Overview

Crownstack has engaged with Trajector as its Product Engineering Partner since 2024 to revamp and continuously improve its multiple existing products, delivering a better user experience and making them more structured, scalable, and responsive. The scope included Frontend, Backend, DevOps, Quality Assurance and Project Management.

About the Customer

Trajector, founded in 2014, helps underserved individuals with disabilities access the benefits they deserve from government and private sources. The organisation gathers essential medical evidence and offers expert support. Many Americans with disabilities face challenges in obtaining their benefits due to confusing eligibility rules and complicated



proof requirements. Trajector addresses these issues with empathy and dedication.

Industry	Information Services
Company Size	1,001- 5,000

Business Challenges

- The Trajector team operates globally in various regions, including the United States and India. A robust cloud infrastructure supports this worldwide reach, ensuring 24/7 availability, reliability, and seamless scalability. The team's goal is to optimise daily operations and enhance processes for individuals with disabilities.
- Trajector utilises a diverse ecosystem of internal microservices and monolithic applications. Different teams—operations, finance, customer support, medical, legal, and compliance—require continuous software enhancements to address emerging challenges and inefficiencies. Meeting these evolving needs necessitates large-scale, distributed, and collaborative software engineering efforts from the technical team.



Business Solution

Our engineering, project management, and quality assurance teams collaborated closely with the Trajector team to help them overcome their business challenges.

- The engineering team collaborates closely with the Trajector team daily to foster innovation, implement enhancements to the codebase, address complex challenges, and ensure the stability of code releases across their various software systems in production.
- The project management team effectively partnered with the engineering teams to adopt best-in-class Scrum practices. These encompassed sprint planning, requirements gathering, work estimation, backlog grooming, brainstorming sessions, brown bag discussions, sprint retrospectives, and demonstrations. This collaborative methodology ensured maximum productivity and high-quality outcomes from the engineering teams.
- The Quality Assurance team worked diligently alongside the engineering teams to identify, test, and validate bug fixes, ensuring that all issues were resolved before the release of features into production. To achieve an effective balance between thorough testing of new modules and efficient regression testing of existing functionalities, the QA team employed a combination of manual and automated testing utilising Playwright.

Technology Stack

Frontend	Angular, React.js, Redux,
Backend	Node.js (Express), <u>SST</u> , PHP, Python, GraphQL, MySQL, PostgreSQL, Elasticsearch, MongoDB
DevOps	AWS Cloud, GitHub Actions, Terraform, Kubernetes, Helm chart, Sentry
Project Management	Aha!
Testing	Manual & Automation testing using Playwright

Business Outcome -

- Through a long-standing collaboration between Crownstack and Trajector's engineering teams, we have successfully delivered reliable, scalable, and innovative software solutions that seamlessly integrate into Trajector's extensive network of internal microservices and monolithic applications.
- For selected products, Crownstack assumes direct responsibility for overseeing production releases, ensuring the software's stability and health throughout both the pre-production and post-production phases.



- Crownstack has contributed to this initiative by developing comprehensive documentation, guides, and process flows that address complex requirements and software setups.
- This effort enables new team members to quickly understand the ecosystem and enhances their ability to set it up efficiently.
- Furthermore, through ongoing collaboration with project management teams, both teams have effectively established robust Scrum practices that promote improved productivity across engineering and quality assurance departments.
- Moreover, we have expanded automation testing for existing software, significantly reducing the time allocated to repetitive smoke testing of legacy code.

Further Links

<u>Learn More About Crownstack's Offerings</u> <u>Learn More about Trajector</u>

