

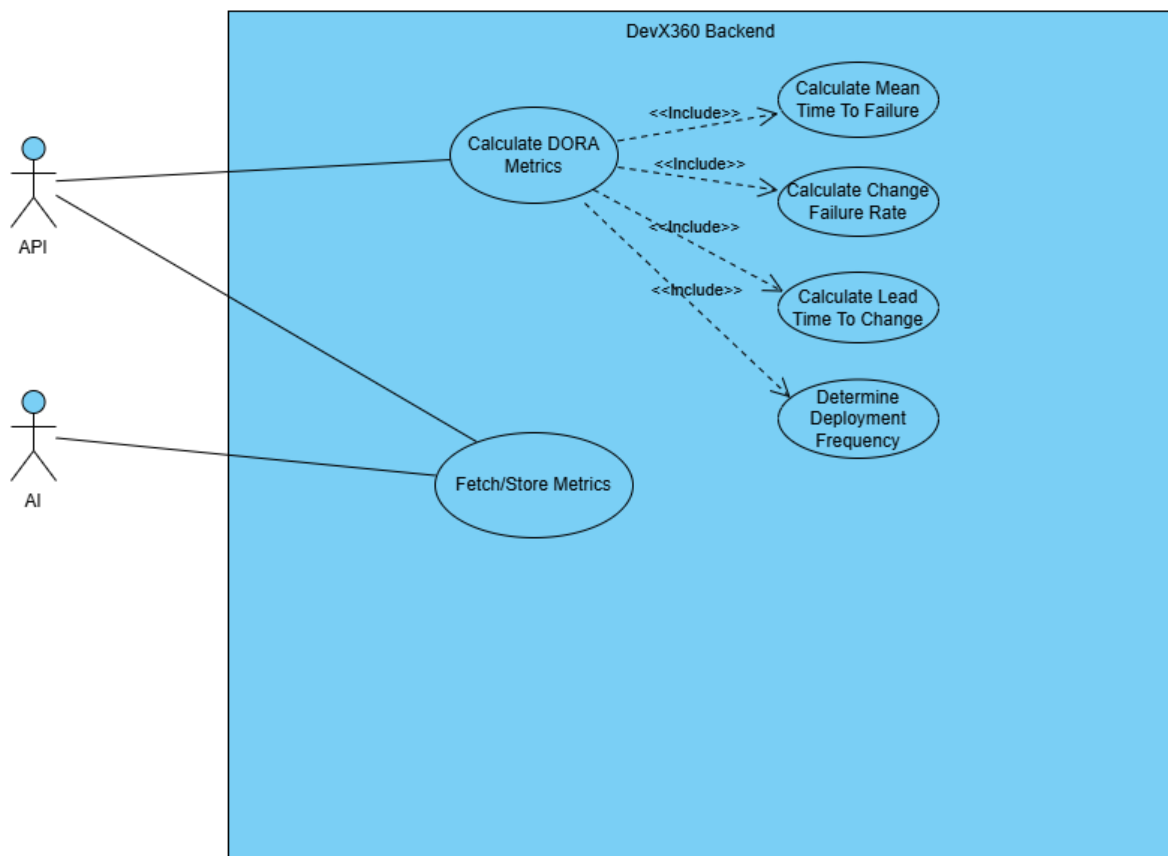
DEVX360

Sipho Sehlapelo
Kesley Hamann
Sibusiso Mngomezulu
Lwando Msindo
David Musa-Aisien

DevX360

BACKEND USE CASES

The backend component serves as the core processing and storage unit of the DevX360 platform. It is responsible for fetching and storing repository information, performing calculations for DORA metrics, and maintaining a consistent interface for other system components. The use case diagram illustrates the main functionalities of the backend and the interactions with its primary actors, including the API and the AI Analysis component.



The backend system handles all repository data management and DORA metric calculations, covering MTTF, change failure rate, lead time for changes, and deployment frequency. While the AI component performs advanced analysis, all requests to the backend are mediated through the API, which forwards and intercepts data to ensure security and consistency. This design maintains a clear separation of concerns, with the backend focusing on data integrity and computation, while the API and AI components handle communication and intelligent analysis, respectively.