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## What is MagicDraw ?

Designed for Business Analysts, Software Analysts, Programmers, QA Engineers, and Documentation Writers, this dynamic and versatile development tool facilitates analysis and design of Object-Oriented (OO) systems and databases. It provides the industry's best code engineering mechanism (with full round-trip support for Java, C++, CL (MSIL) and CORBA IDL programming languages), as well as database schema modeling, DDL generation and reverse engineering facilities.

DASSAULT SYSTEMES

MagicDraw is a standout modeling tool known for its commitment to industry standards, adaptability, and user-friendliness. It provides support for the UML 2 metamodel, adheres to the latest XMI standard for data storage, and accommodates popular programming languages for implementation. This compliance ensures a solid foundation for your modeling needs.

What sets MagicDraw apart is its flexibility within the Software Development Life Cycle (SDLC). It doesn't prescribe a one-size-fits-all approach; instead, it allows you to mold your SDLC environment to your specific business requirements. This adaptability extends to its Open API, making integration with other applications seamless and tailored to your needs. MagicDraw collaborates effortlessly with various leading products, including IDEs, requirements management, testing, estimation, model-driven development, and databases.

MagicDraw's independence from specific development methodologies is a significant advantage. It doesn't confine you to a rigid process but gracefully aligns with your company's unique approach. Whether you're in the requirements gathering phase or dealing with maintenance, MagicDraw is versatile and can be integrated at any point in your project. This adaptability encourages centralization of business and process modeling, requirements capture, and design activities.

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# Image converter to the SysML v2 model

You will create/design from scratch/”green field” a web application or microservice based on **AI** and the most popular web technologies/frameworks in the market.

The application should generate a SysML v2 model from the provided system sketch.

The generated SysML v2 model should be open in the most popular design tool, "Cameo Enterprise Architect" or the web application "MagicLab" .

## Tech stack

- AI
- JDK 21
- Angular 20
- Spring 6.x
- TypeScript 5.8.x
- CI/CD
- Maven
- NgRx
- Cassandra 5.x
- Kubernetes
- GIT
- IntelliJ IDE
- Agile/Scrum

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# SysML v2 model querying based on voice or text

You will create/design from scratch/”green field” a web application or microservice based on **AI** and the most popular web technologies/frameworks in the market.

A web application should accept voice or text queries execute them on selected SysML v2 model. Present result in aggregated form and display  in user friendly text or table format.

## Tech stack

- AI
- JDK 21
- Angular 20
- Spring 6.x
- TypeScript 5.8.x
- CI/CD
- Maven
- NgRx
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- Kubernetes
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