

PetPal

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TASK#	PROJECT TASKS WHICH REQUIRE SOFTWARE TOOLS SUPPORT
1	Mobile Application Development
2	Database Management System
3	User Interface Design

SOFTWARE TOOLS FOR TASK 1:

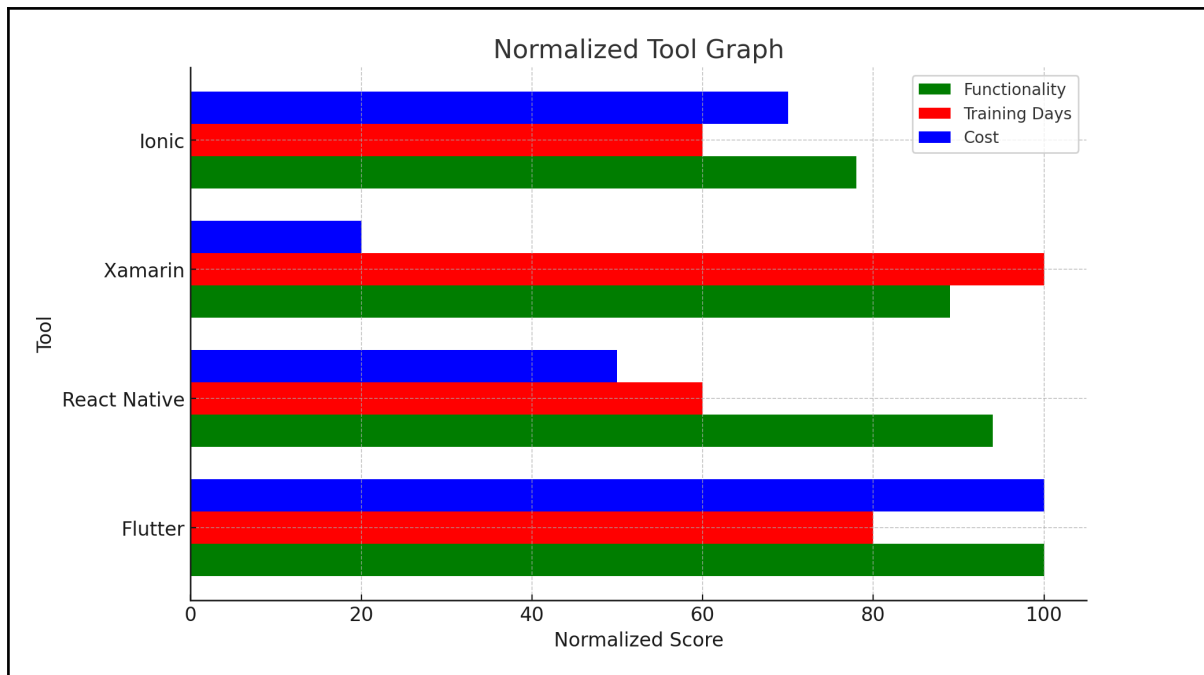
Tool Cost/Training/Functionality Data

Tool	Flutter	React Native	Xamarin	Ionic
Cost	\$50,000	\$25,000	\$10,000	\$35,000
Training Days	28	21	35	21
Functionality	90	85	80	70

All costs written above are estimated development costs for the app when the tool in question is used. Each listed tool is free to use for public / commercial use, meaning the only costs related to the app once development is over will be maintenance and update costs.

Normalized Cost/Training/Functionality Data

Tool	Flutter	React Native	Xamarin	Ionic
Cost	100	50	20	70
Training Days	80	60	100	60
Functionality	100	94	89	78



Which tool has been selected? Why?

We chose Flutter because, despite being the most expensive option, it offers high functionality that justifies the cost. It provides excellent performance, a wide range of UI/UX design tools, and a fast development speed once the team has completed training. Additionally, Flutter has a growing and supportive community, which will help resolve technical challenges efficiently, ensuring smooth development.

SOFTWARE TOOLS FOR TASK 2:

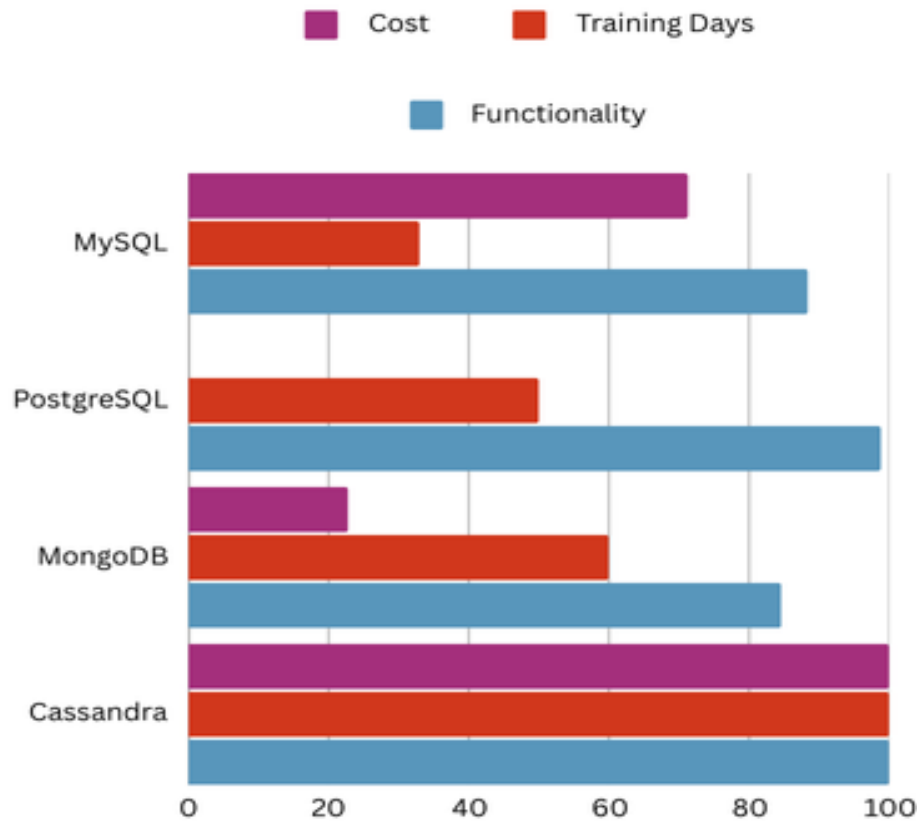
Tool Cost/Training/Functionality Data

Tool	MySQL	PostgreSQL	MongoDB	Cassandra
Cost	\$2,140/y	\$0	\$684/y	\$3,000/y
Training Days	10	15	18	30
Functionality	76	85	86	72

Normalized Cost/Training/Functionality Data

Tool	MySQL	PostgreSQL	MongoDB	Cassandra
Cost	71.3	0	22.8	100
Training Days	33	50	60	100
Functionality	88,4	98,8	84,6	100

Normalized Tool Graph



Which tool has been selected? Why?

We chose PostgreSQL because, while it requires more training, it offers superior functionality and data integrity. It provides excellent performance, scalability, and support for complex queries, making it ideal for applications handling large datasets. Additionally, its being free of charge is a significant advantage. PostgreSQL has a strong open-source community, which helps resolve technical challenges efficiently, ensuring long-term reliability.

SOFTWARE TOOLS FOR TASK 3:

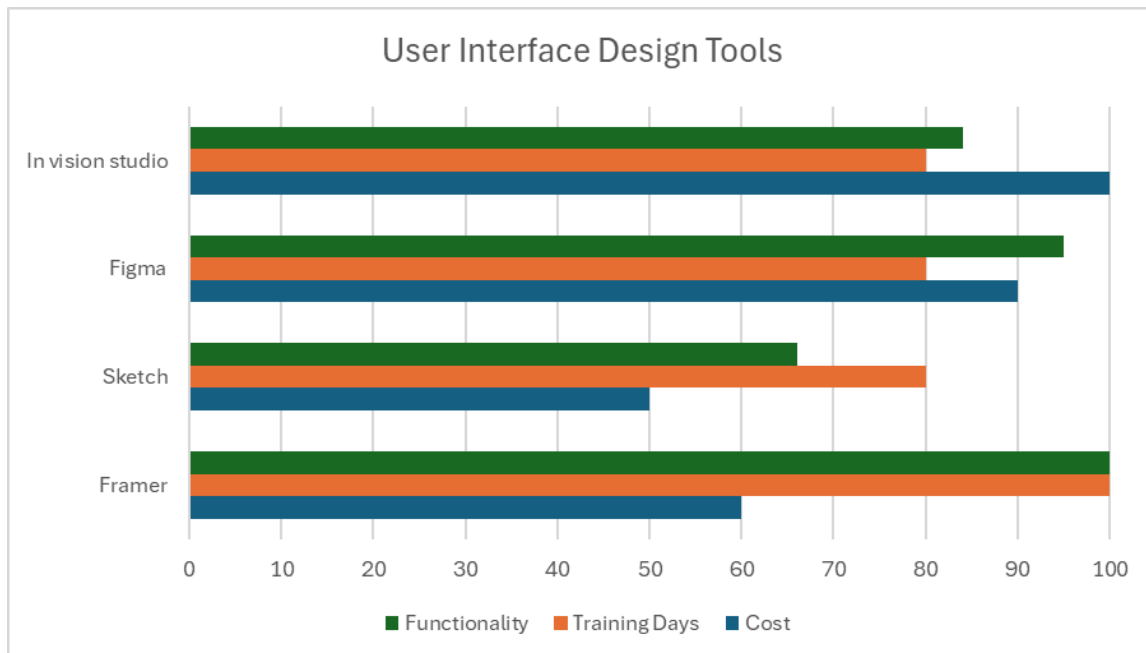
Tool Cost/Training/Functionality Data

Tool	FRAMER	SKETCH	FIGMA	IN VISION STUDIO
Cost	\$300/y	\$250/y	\$450/y	\$500/y
Training Days	10	8	8	8
Functionality	90	60	85	75

Normalized Cost/Training/Functionality Data

Tool	FRAMER	SKETCH	FIGMA	IN VISION STUDIO
Cost	60	50	90	100
Training Days	100	80	80	80
Functionality	100	66	95	84

Normalized Tool Graph



Which tool has been selected? Why?

We chose Figma because Figma offers powerful collaboration and design tools for team-based projects like PetPal. Its cloud-based structure makes it platform-independent and accessible from any device, allowing for a quick start without complex setups. Additionally, Figma's interactive prototyping features are ideal for testing the app's user experience (UX).

Figma will be used to design all screens of the PetPal mobile app, including a real-time animal location map, animal profiles (name, photo, health status, vaccination details), an adoption request form, and refill alerts for smart food and water bowls.

With extensive plugin support, tasks such as creating color palettes, adding icons, and exporting assets are streamlined, optimizing the design process.