

SE 216 – SOFTWARE PROJECT MANAGEMENT
SOFTWARE TOOLS DOCUMENT

PROJECT NAME: HOME AGAIN

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TASK #	PROJECT TASKS WHICH REQUIRE SOFTWARE TOOL SUPPORT
1	MOBILE APPLICATION IMPLEMENTATION
2	DATABASE DESIGN
3	VERSION CONTROL & MANAGEMENT

SOFTWARE TOOLS FOR TASK 1: IMPLEMENTATION

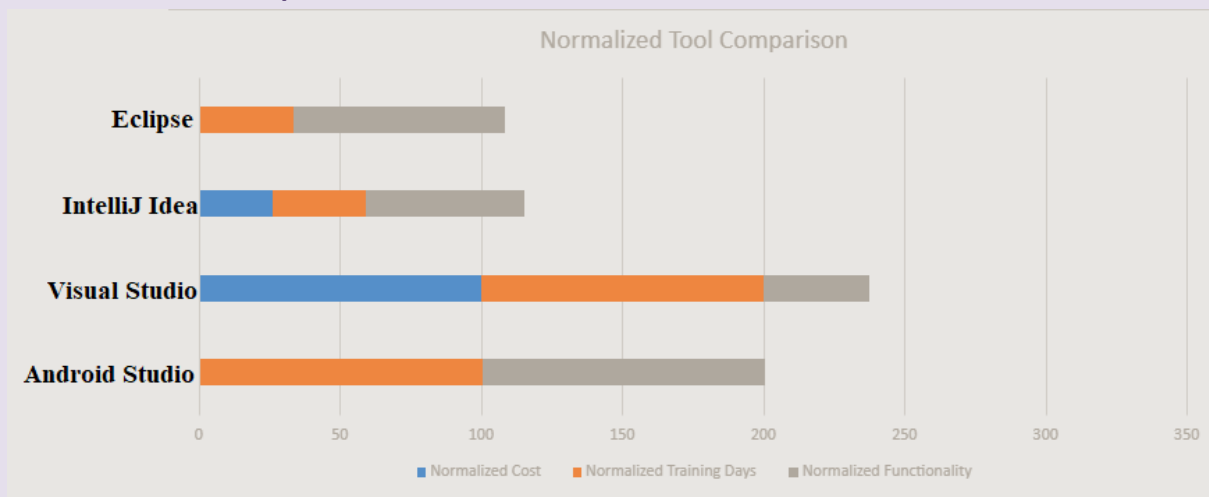
Tool Cost/Training/Functionality Data

Tool	Android Studio	Visual Studio	IntelliJ Idea	Eclipse
Cost	\$1 (Free)	\$250 (monthly) - \$1 (Free)	\$64.90 (monthly) - \$1 (Free)	\$1 (Free)
Training Days	15	15	5	5
Functionality	80	30	45	60

Normalized Cost/Training/Functionality Data

Tool	Android Studio	Visual Studio	IntelliJ Idea	Eclipse
Cost	0.4 (for \$1)	100 (for \$250)	26 (for \$64.90)	0.4 (for \$1)
Training Days	100	100	33.3	33.3
Functionality	100	37.5	56.25	75

Normalized Tool Graph



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Which tool has been selected? Why?

Since we wanted to make an Android application, we chose Android Studio, thinking that it would be more useful to use the coding, testing and graphical user interface editing part of Android Studio. It is free and easy to install. It has good refactoring tools. Even though it will take longer to learn how to use this program, it has the best functionality. We will be able to do all the implementation, gui design and testing processes within only one tool. So, it actually saves time.

SOFTWARE TOOLS FOR TASK 2: DATABASE DESIGN

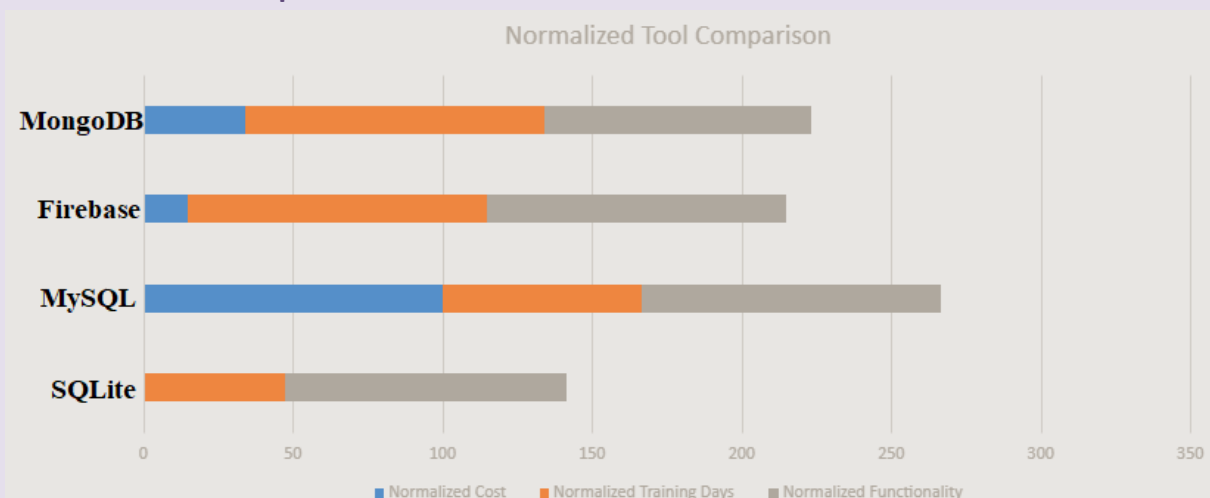
Tool Cost/Training/Functionality Data

Tool	SQLite	MySQL	Firebase	MongoDB
Cost	\$2000 (one time fee)	\$166.6 (monthly)	\$24.99 (monthly)	\$57 (monthly)
	-	-	-	-
	\$1 (Free)	\$1 (Free)	\$1 (Free)	\$1 (Free)
Training Days	7	10	15	15
Functionality	85	90	90	80

Normalized Cost/Training/Functionality Data

Tool	SQLite	MySQL	Firebase	MongoDB
Cost	0.6 (for \$1)	100 (for \$166.6)	15 (for \$24.99)	34.2 (for \$57)
Training Days	46.7	66.7	100	100
Functionality	94.4	100	100	88.9

Normalized Tool Graph



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Which tool has been selected? Why?

We chose to use MySQL because it has the best functionality. For example, it is easy to use, it has a lot of database related features, its security feature is quite good, it is easily scalable and suitable for large databases, It provides good speed and performance, its user management is good, and it provides multiple access control. Its free version has all the features we need. Also, since we are currently learning MySQL at university, it will take less time to learn how to use it.

SOFTWARE TOOLS FOR TASK 3: VERSION CONTROL & MANAGEMENT

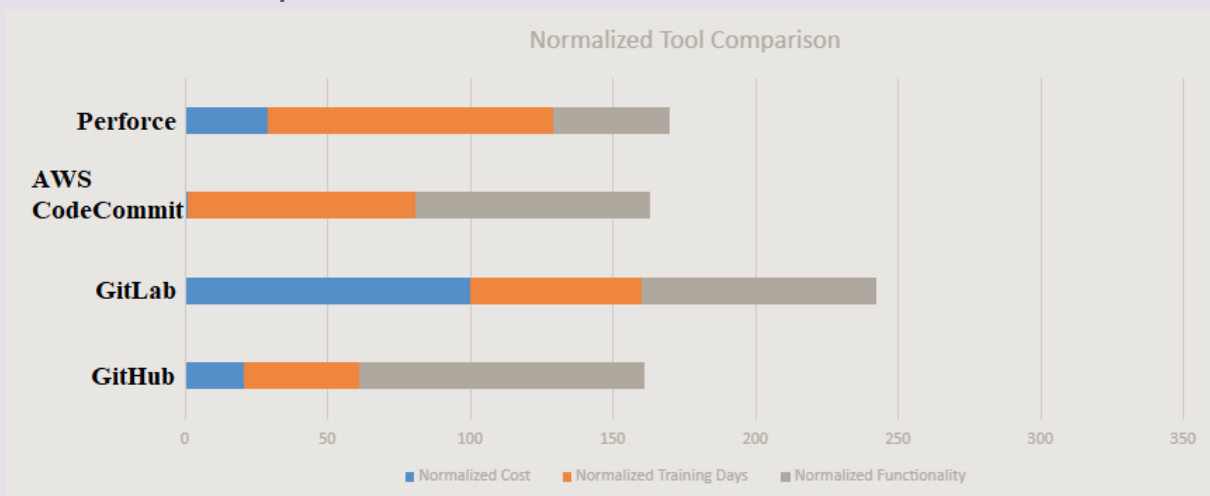
Tool Cost/Training/Functionality Data

Tool	GitHub	GitLab	AWS CodeCommit	Perforce
Cost	\$21 (monthly) - \$1 (Free)	\$100 (monthly) - \$1 (Free)	\$1 (Free) - Pricing based on usage	\$29 (monthly) - \$1 (Free)
Training Days	10	15	20	25
Functionality	85	70	70	35

Normalized Cost/Training/Functionality Data

Tool	GitHub	GitLab	AWS CodeCommit	Perforce
Cost	21 (for \$21)	100 (for \$100)	1 (for \$1)	29 (for \$29)
Training Days	40	60	80	100
Functionality	100	82.3	82.3	41.1

Normalized Tool Graph



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Which tool has been selected? Why?

GitHub is a website that allows programmers to work together on code. The first benefit is that it allows working together without damaging the project. Projects on GitHub are an example of open source software. It is easy to learn and its functionality is the best among others. Also, GitHub provides a student pack for free which has all the features of paid professional accounts. That's why we chose to use GitHub.

Note: *All of the prices were selected according to the monthly prices of the enterprise editions.*