

**SE 216 – SOFTWARE PROJECT MANAGEMENT**  
**SOFTWARE TOOLS DOCUMENT**

**PROJECT NAME:** SharpFridge

**GROUP NUMBER and MEMBERS:** Group-2; Canercan Demir, Merve Topal, Yiğit Mora, Yağmur Duvan, Kaan Dönmez, Berkay Işık

TASK #	PROJECT TASKS WHICH REQUIRE SOFTWARE TOOL SUPPORT
1	Mobile Push Notifications
2	Database Integration
3	Product Icons
4	Project Task Management

**SOFTWARE TOOLS FOR TASK 1: Mobile Push Notifications**

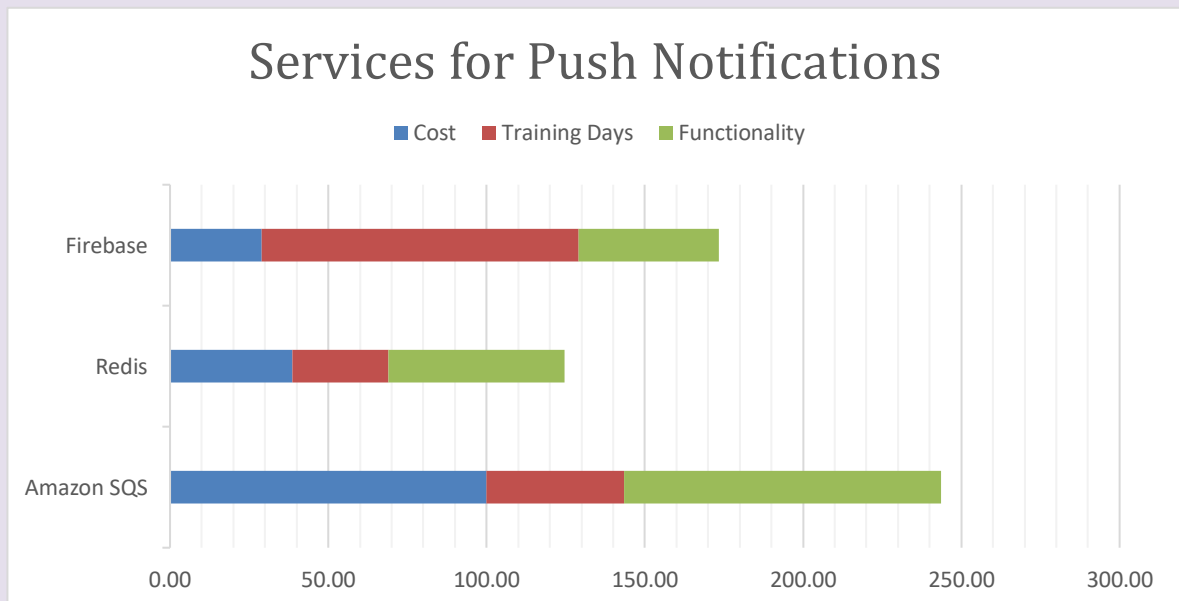
**Tool Cost/Training/Functionality Data**

Tool	Amazon SQS	Redis	Firebase
Cost	\$1,552.42/mo	\$600/mo	\$450/mo
Training Days	10	7	23
Functionality	90	50	40

**Normalized Cost/Training/Functionality Data**

Tool	Amazon SQS	Redis	Firebase
Cost	100	38.7	29.0
Training Days	43.5	30.4	100
Functionality	100	55.5	44.4

**Normalized Tool Graph**



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**Which tool has been selected? Why?**

For push notification, speed and robustness are more important than costs. Therefore, we choose Amazon simple queue service as our cache database.

#### SOFTWARE TOOLS FOR TASK 2: Database Integration

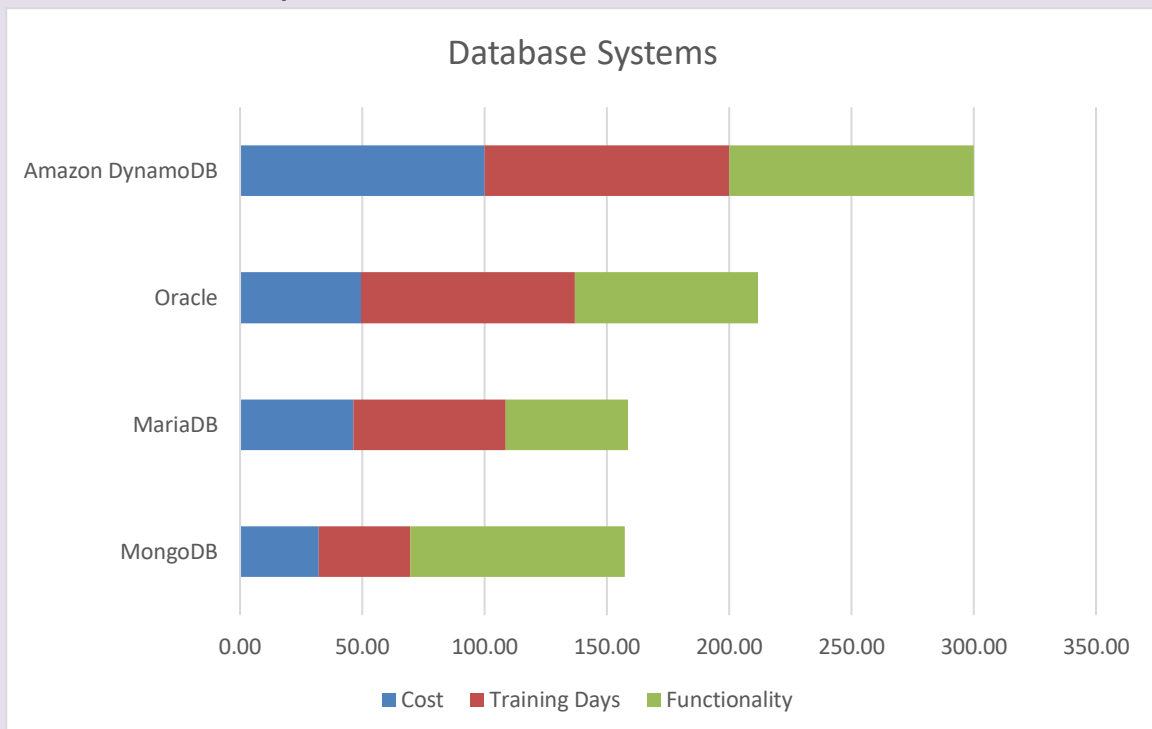
##### Tool Cost/Training/Functionality Data

Tool	MongoDB	MariaDB	Oracle	DynamoDB
Cost	\$300/Mo	\$430/Mo	\$460/Mo	\$930/Mo
Training Days	3	5	7	8
Functionality	70	40	60	80

##### Normalized Cost/Training/Functionality Data

Tool	MongoDB	MariaDB	Oracle	DynamoDB
Cost	32.2	46.2	49.4	<b>100</b>
Training Days	37.5	62.5	87.5	<b>100</b>
Functionality	87.5	50	75	<b>100</b>

##### Normalized Tool Graph



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Which tool has been selected? Why?

DynamoDB is chosen for its reliability, speed and flexibility. When there is a huge data traffic, DynaDB handles it well. Functionality ranking reflects the recognition of DynamoDB's scalability, performance, and managed nature, making it highly effective, particularly for large-scale projects.

#### SOFTWARE TOOLS FOR TASK 3: Product Icons

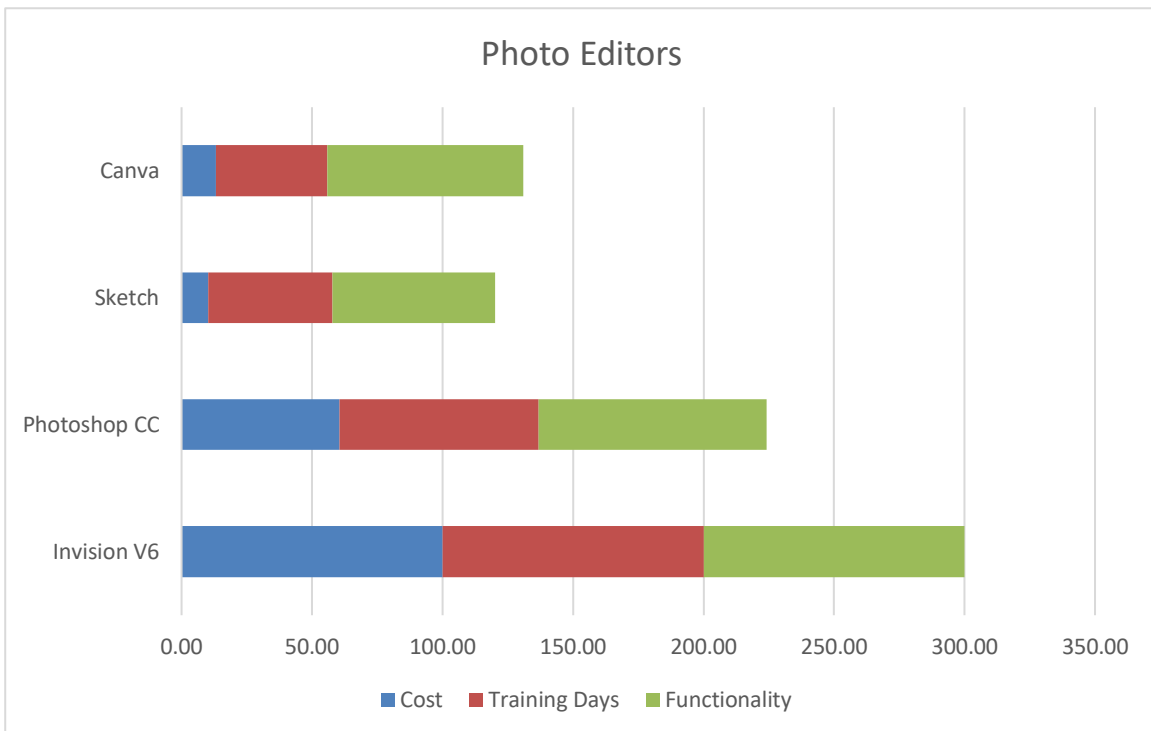
##### Tool Cost/Training/Functionality Data

Tool	InVision V6	Photoshop CC	Sketch	Canva
Cost	\$99/Mo	\$60/Mo	\$10/Mo	\$13/Mo
Training Days	21	16	10	9
Functionality	80	70	50	60

##### Normalized Cost/Training/Functionality Data

Tool	InVision V6	Photoshop CC	Sketch	Canva
Cost	100	60.6	10.1	13.1
Training Days	100	76.1	47.6	42.8
Functionality	100	87.5	62.5	75

##### Normalized Tool Graph



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**Which tool has been selected? Why?**

Photoshop CC is a popular choice for desing. It is chosen due to the ease of finding a designer, its large community and abundance of resources on the web. Also, its pricing is in acceptable boundaries.

#### SOFTWARE TOOLS FOR TASK 4: Project Task Management

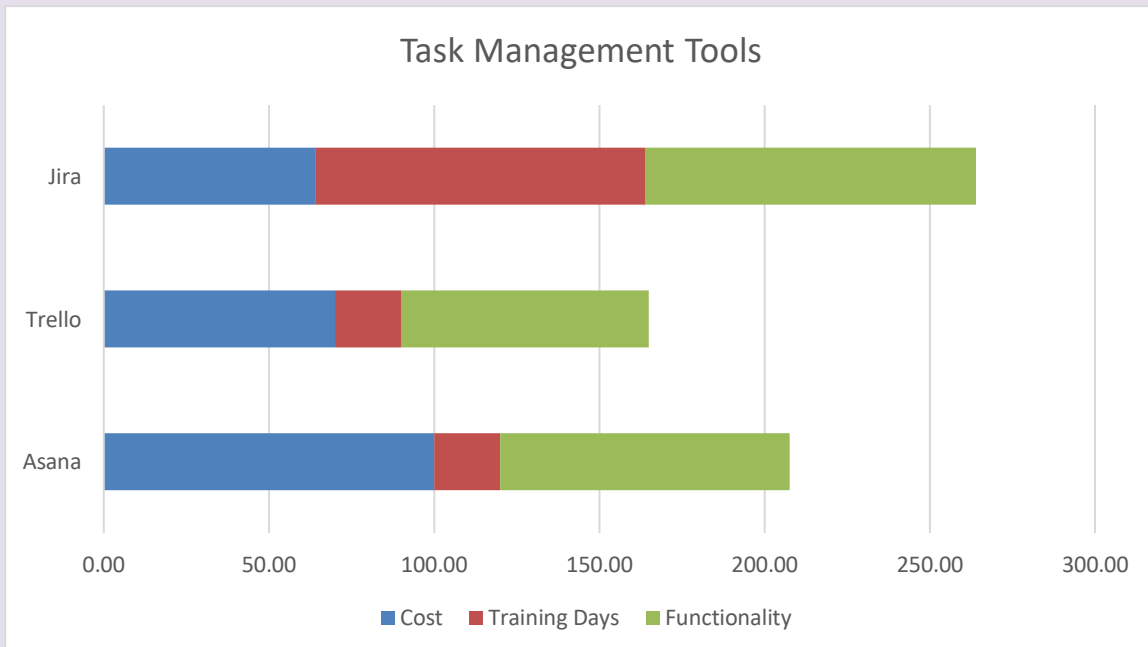
##### Tool Cost/Training/Functionality Data

Tool	Asana	Trello	Jira
Cost	\$250/Mo	\$175/Mo	\$160/Mo
Training Days	1	1	5
Functionality	70	60	80

##### Normalized Cost/Training/Functionality Data

Tool	Asana	Trello	Jira
Cost	<b>100</b>	70	64
Training Days	20	20	<b>100</b>
Functionality	87.5	75	<b>100</b>

##### Normalized Tool Graph



**Which tool has been selected? Why?**

For project management, Jira is selected. Jira is more cost-effective. Suitable for large, complex projects with advanced project management needs. Also, agile implementation of Jira is more advanced.

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