



DATABASE SYSTEM

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DECEMBER 20, 2023



INTRODUCTION

Database systems are systems that are used for collection, management and retrieval of data. These systems act as an interface between the users and the data. It uses specialized softwares such as Microsoft Access and MySQL which can manage large volumes of data in a way that the user can create, update, use and manipulate the data efficiently. The systems also can control the authority by who can access the data to ensure it remains accurate and reliable. Database system involves data modeling, data integrity and data security to maintain the data quality as it is fundamental in various industries like finance, business and others. The systems offer a lot of benefits compared to the traditional system in aspects of flexibility and user-friendly interfaces.

EMPATHIZE



INTERVIEWS

We had some interviews with the person who is in charge of the database system of University of Technology Malaysia, Mr Aris bin Ariffin.

QUESTIONS ASKED

- 1.What are the common problems that you faced while managing the database system ?
- 2.What are the possible solutions that you hope to solve the problems that you have faced ?

ISSUES DISCUSSED

Mr Aris said that from the user point of view in managing the database system, the user usually needs to create the table and check the properties of the table in terms of normalisation and indexing manually by themselves. This will become a problem when a beginner and rookie that are not familiar with the data handling, they will face issues in creating the table for their data and managing it proficiently.

OPINIONS OF THE INTERVIEWEE

Mr Aris recommended that there should be a tool that can assist the users to create the data table and check the properties of the table automatically. Thus, it will potentially reduce the cost and energy of the users to manage their data in the system.

INTERVIEWS SESSIONS



DEFINE

For this phase, we analyzed and evaluated the results we obtained from the interview and we had established a clear idea of our problem statement which are:

1. Some of users that manage database system are clueless on how to manage their data effectively due to lack of skills in using the softwares.
2. Users might drain their energy and cost to handle their data because the current systems do not have any tools that can help them to manage the data automatically.



IDEATE

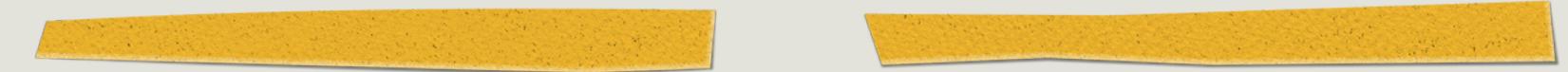
We came up with the idea of our prototype that is to assist the user on an application software that involves database management like Microsoft excel using an ai assist

To elaborate, our software called **Power Business Management** abbreviated as Power BM can help our user in doing **data normalization, indexing**, and checking by our owned AI called **Neuro Intelligence Sorting Assistance, NISA AI**. In addition, this AI can also guide its user on how to solve the problems that occur step by step.

Furthermore, by adapting via machine learning this AI can also improvise its algorithm as it stumbles upon harder and more complex situations.



PROTOTYPE AND TESTING





PowerBm



Yad & Co

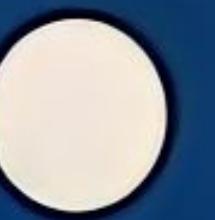


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	0001	Aina	010919090880	01245678989	09/19/01	Math,English	MS2020
	0002	Sarah	010623094544	01985852325	06/23/01	Math,Bahasa Melayu	MS2021
	0003	Aiman	000202134113	01174851234	02/02/00	Chemistry,Physics	MS2022
	0004	Ali	000204134117	01174851235	04/02/00	Chemistry,History	MS2023
	0005	Imran	001102134113	01274851234	02/11/00	History,Biology	MS2024



Nisa can you sort this data based on subjects
for me <3

NISA AI



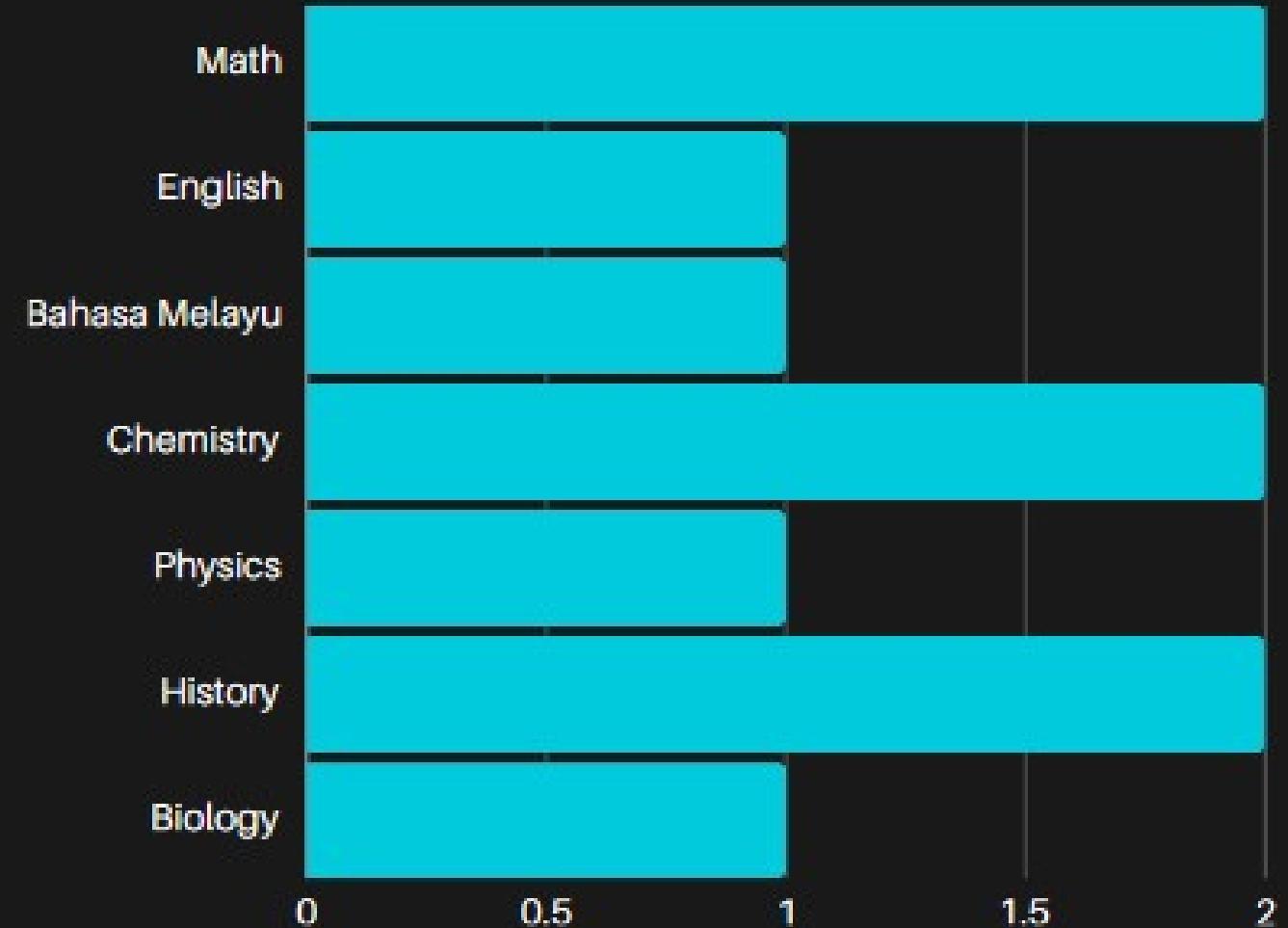
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	0003	Aina	010919090880	01245678989	09/19/01	English	MS2020
	0004	Sarah	010623094544	01985852325	06/23/01	Bahasa Melayu	MS2021
	0005	Aiman	000202134113	01174851234	02/02/00	Chemistry	MS2022
	0006	Ali	000204134117	01174851235	04/02/00	Chemistry	MS2023
	0007	Aiman	000202134113	01174851234	02/02/00	Physics	MS2022
	0008	Ali	000204134117	01174851235	04/02/00	History	MS2023
	0009	Imran	001102134113	01274851234	02/11/00	History	MS2024
	0010	Imran	001102134113	01274851234	02/11/00	Biology	MS2024



Nisa can you give a summary about the distribution of subjects and visualize it for me?

NISA AI

SUMMARY



Based on the database, there are 7 subjects that are registered which are :

- Math (2 Students)
- English (1 Students)
- Bahasa Melayu (1 Students)
- Chemistry (2 Students)
- Physics (1 Students)
- History(2 Students)
- Biology (1 Students)



THANK YOU!