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Information Systems Interest Talent in Developing System (Independent and Innovative Creative Economy) on Child with Special Needs Disabled in Bandung City

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Abstract. The purpose of making this system is to direct people with special needs to be able to have equal rights in society, they will be directed to know the abilities and skills they have, so that by the time they last educated, they are ready to have an independent soul to create a field of business or ready to become a productive entrepreneur. Using structured shortcuts method so that the analysis result from making the system can be described clearly to describe the functions obtained in a talent interest information system, thereby producing a talent interest information system in support of the creative economy and innovation of special needs children. With this system, special needs children can be allocated in accordance with the capabilities possessed by special needs. Interest Information System This talent can improve the welfare of life through the container as a job for the special needs for the city of Bandung and surrounding areas with this research it can be make decision which adjusted with special needs in society by value the question in certain areas.

1. Introduction

Build the system information that supports special needs is a factor is very important in help of limitations that are present, so that an limited not be a problem that could not be solved, with the information system decision-making in a comparison an exponential give prominence that technology can contribute large in all the condition [1].

Decision making system in the selection of schools using Exponential Comparison Methods (ECM) In State and Private Universities in West Java is a supportive system that helps students in determining the majors that he will take at a university in education by making an information / application system. This application provides selection information according to the student's ability, but this system only supports for general students who have normal life [2], while the decision support system of employee performance appraisal on electronic store by using comparison of exponential method is a system to provide information performance appraisal of employees within a company. With this system provides ease in the company to improve the overall performance of the company [3].

From the two previous studies that have been done then it can help in building a system to support the Decision in the Selection of Field Skills Using Exponential Comparison Method (ECM) In the School of Extraordinary Affairs, In this case the advantage of making this system is to build this application can be applied to people who have special needs, so get the same treatment in the city of Bandung.



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2. Research methods

The research method can be seen in Figure 1.

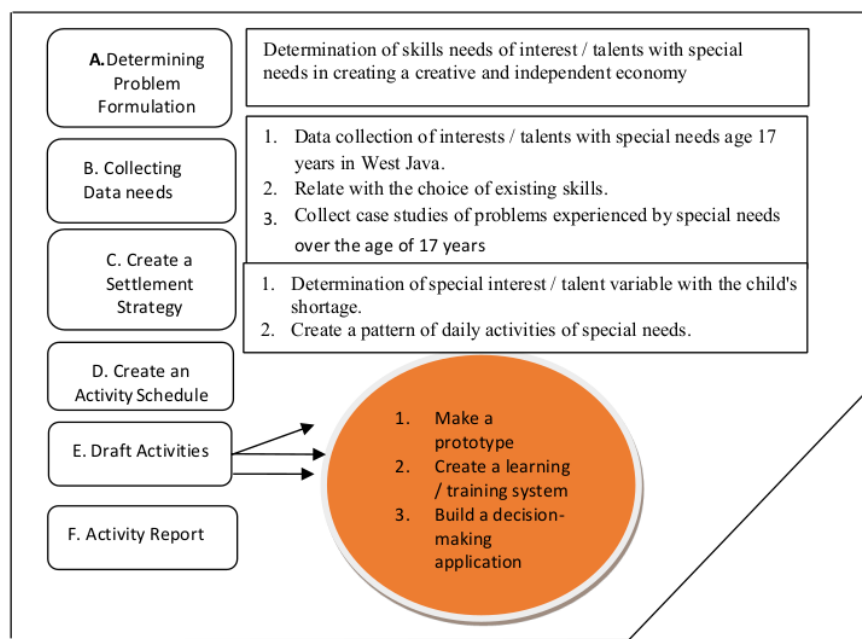


Figure 1. Prototype model.

This method is composed of [4]:

- Determine the formulation of the problem
What problems happen to special needs in general and special in Bandung.
- Collecting data needs
Conducted by means of observation, interview and testing through the provision of questionnaires.
- Create a settlement strategy
Determine the functions to be built in the application.
- Create an activity schedule
This activity schedule is required to organize activities from data collection needs to application creation.
- The design of activities.
Write down all settlement activities through the tools in the form of images.
- Activity report
Report all activities in the form of a report as a reference evaluation report at the end of the application

3. Results and discussion

3.1. Calculation result of ECM calculation

For the information system created, the process of calculating the value of the first stage of the questionnaire is using the Exponential Comparison Method. The following will explain the simulation

of the ECM calculation. From the above criteria data will be assessed by the Exponential Comparison Method like the simulation at (Table 1) [5-7].

Table 1. Simulation of ECM manual calculation.

Names of special Needs	No Question	Criteria		Total value
		B	R	
Joko susanto	1	3	5	225
	2	3	4	
	3	3	3	
	4	3	2	
	5	3	2	

Information:

W = Weight R = Range

Example calculation:

Value question 1: $5^3 = 125$

Value question 2: $4^3 = 64$

Value question 3: $3^3 = 27$

Value question 4: $2^3 = 8$

Value question 5: $1^3 = 1$

Total Value (ECM) = $125+64+27+8+1 = 225$

The total value of stage 1 of this questionnaire shows the result of the questionnaire criteria assessment which is weighted so that the total value obtained by the Exponential Comparison Method is obtained.

This research should be built because the special needs should have the same treatment with other normal children so that their future can be determined early so that the goal can be achieved, as for the purpose is as follows:

- To design technology-based decision support systems to assist students with special needs in selecting areas of skills appropriate to their abilities, interests, talents and personality
- To build this system covers the manufacture of systems, testing and implementation in the extraordinary schools of the country in the city of Bandung.
- To provide solutions by making a decision making system in a state of the art school that allows students with special needs to choose a skill area that suits their abilities, talents, personalities, and interests.

3.2. System overview

General description of the system that researchers make is a system that can provide accurate and clear information for the interests / talents / skills to be selected by a special needs. This information system can also examine whether the interests / talents / skills that are chosen for specific needs in accordance with their interests and abilities so that future special needs can follow have a productive value through the selected entrepreneurship (Figure 2).

The depiction is done by a structured approach, which consists of several tools such as:

3.2.1. Relation table [8, 9]

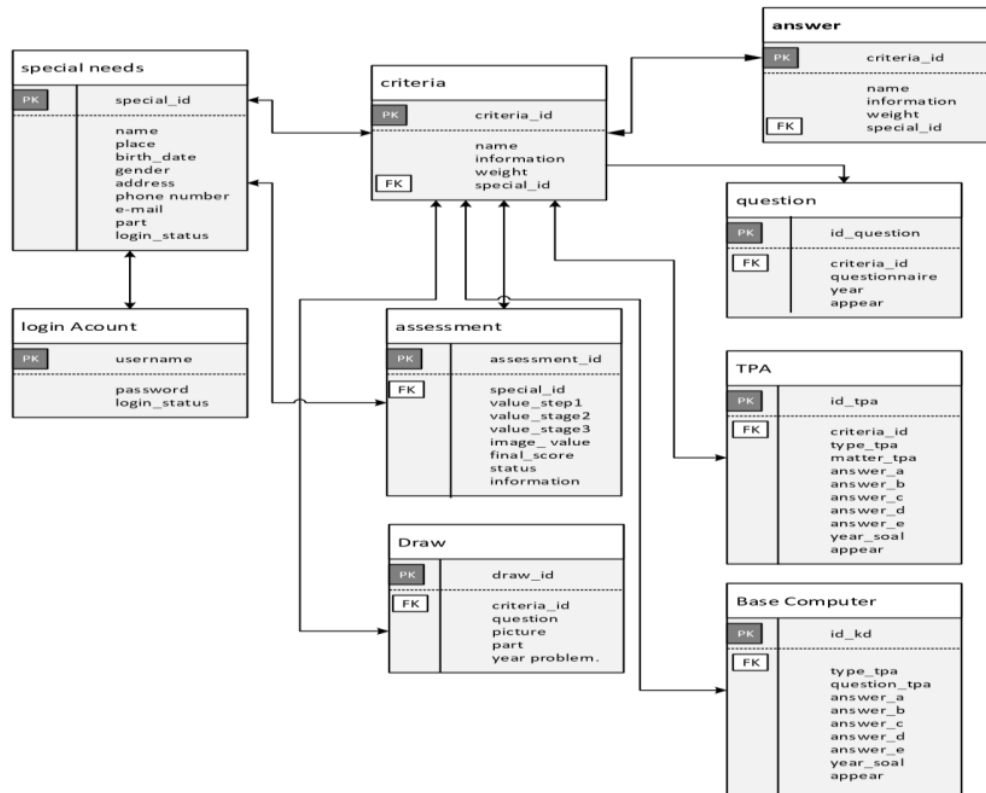


Figure 2. Relation table.

3.2.2. *Entity relation diagram [10].* Database design used is Entity Relationship Diagram (ERD). Entity Relationship Diagram is one of the database modelling method used to generate conceptual scheme for type / model of semantic data system. The main components of ERD are entities, attributes and relationships. An entity is an individual who represents something tangible that can be distinguished from others. R (Figure 3).

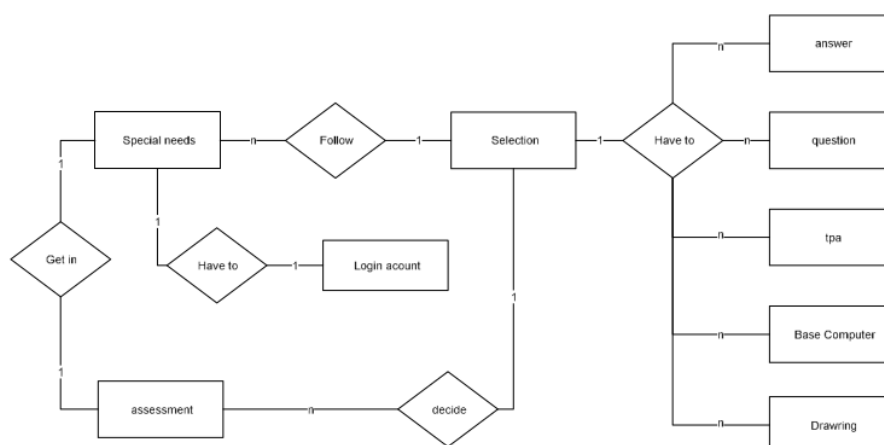


Figure 3. Entity relation diagram.

So on this study aims on the making of application , excess this research could become one of the supporting by using the method comparison an exponential , so that the result of calculation value precisely with the questions provided in the form of application that can be directly used , the research also provide an illustration of application made through the illustrations the scheme data over the table mutual relation and entity relations diagrams in application so ease maker application in to implement , if previous studies only described the processes calculation / assessment just , so this research will deliver more values which are how implement system decision-making in a comparison an exponential into an application [11].

4. Conclusion

By the presence of this application o it can give people the information that determine interest /talent /skills possessed by with special needs to mentally handicapped, autism, less hearing, dumb and deaf, and after the lack of interest in their natural talents in period put it in writing will be adjusted to the types of businesses should have based on the capabilities of the specific needs

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References

- [1] Bolstorff P and Rosenbaum R 2003 *Supply chain excellence: a handbook for dramatic improvement using the SCOR model* (Amacom, New York).
- [2] Andri S S and Citra N "Perancangan Pemodelan Sistem Penentuan Keputusan Untuk Pemilihan Jurusan Menggunakan Metode Perbandingan Eksponensial (Mpe) Perguruan Tinggi Di Jawa Barat", *Jurnal Pengkajian dan Penerapan Teknik Informatika* **10** (22) ISSN 19780-9262.
- [3] Linda A, Ilman Z Y and Rosi M 2013 "Sistem Pendukung Keputusan Penilaian Kinerja Pegawai Pada Toko elektronik Menggunakan Metode Perbandingan Eksponensial," *Prosiding Seminar Nasioanl Ilmu Komputer (SeNAIIK 2013)*, Samarinda 1 November 2013, Universitas Mulawarman.
- [4] Medhat H A Awadalla 2018 "A Smart Traffic Information System", *International Journal of Computer Applications* **180** (31) 7-11.
- [5] İrem E F E, Esin F, Berhan Ç 2018 "Comparison Of Single And Modified Exponential Smoothing

- Methods In The Presence Of A Structural Break’,” *International Journal of Economic and Administrative Studies* 89-100.
- [6] Moderhak M 2018 “Comparison of the exponential thermal transient parameterization methods with the SMTP method in the unipedicled DIEP flap computer modelling and simulation,” *Quantitative InfraRed Thermography Journal* **76** 12-24.
- [7] Nassar M, Dey S and Kumar D 2018 “A New Generalization of the Exponentiated Pareto Distribution With an Application,” *American Journal of Mathematical and Management Sciences* **66** 1-26.
- [8] Ratnmala B and Manda R N 2018 “A prototype model for continous agriculture field monitoring and assesment,” *International Journal of Engineering & Technology* **77** 179-182.
- [9] Soofi A A and Awan A 2017 “Classification Techniques in Machine Learning : Applications and Issues,” **21** 459–465.
- [10] Liang J, Liu X and Liao K 2017 “Soil Moisture Retrieval using UWB Echoes via Fuzzy Logic and Machine Learning,” *IEEE Internet Things J.* (99) 1.
- [11] Azapagic A and Clift R 1999 “The application of lifecycle assessment to process optimisation,” *Journal of Computers and Chemical Engineering* **23** 15-26.

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