



BEDSIDE TABLE "MEJIKAR" FROM WOOD WASTE MATERIALS

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SESSION 1 2022/2023

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SESSION 1 2022/2023

DECLARATION OF ORIGINAL AND OWNERSHIP

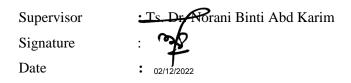
- 1. We are second-year Diploma students in <u>Wood-Based Technology, Civil Engineering</u> <u>Department, Politeknik Sultan Salahuddin Abdul Aziz Shah.</u>
- 2. We acknowledge that our Bedside Table "MEJIKAR" is not taken or copied from any party but rather the work/design of our group itself.

Made and truly acknowledged by the said;

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ABSTRACT

The bedside table is usually manufactured with a size around 53 cm – 71 cm width, and its height should not exceed the height of the bed and should not be too low from the bed. The primary function of this table is to place personal items such as telephones, books, novels, magazines, bedside lamps, medicines, and watches. Bedside tables are generally made from solid wood, particleboard, and other engineered wood; some use iron. Feedback from the respondents is that they want a low-price side table that can be folded to save some space in their bedroom. Therefore, in this project, a bedside table was produced using a plank of pine wood, blockboard, and MDF panel to reduce costs and utilize the wood waste from the polytechnic wood workshop. This table also can fold by using the table fold bracket, which has a self-locking that can support and strengthen the table leg at 90 degrees. In this project, the total cost of the Mejikar Table is below RM 78.00. Therefore, it successfully produced a bedside table at a reasonable price.

Keywords: bedside table, waste wood material, low price.

ABSTRAK

Meja sisi katil biasanya dibuat dengan saiz sekitar 53 cm – 71 cm lebar dan ketinggiannya tidak boleh melebihi ketinggian katil dan tidak boleh terlalu rendah dari katil. Fungsi utama meja sisi ini adalah untuk meletakkan barang-barang peribadi seperti telefon, buku, novel, majalah, lampu tidur, ubat-ubatan, dan jam tangan. Meja sisi katil biasanya diperbuat daripada kayu pepejal, papan partikel, dan pelbagai jenis kayu kejuruteraan lain dan ada yang menggunakan besi. Maklum balas daripada responden, mereka mahukan meja sisi dengan harga yang murah dan juga boleh dilipat bagi menjimatkan ruangan bilik tidur mereka. Oleh itu, dalam projek ini, meja sisi katil telah dihasilkan dengan menggunakan kayu pain, papan blok, dan panel MDF bagi mengurangkan kos dan juga menggunakan sisa kayu dari bengkel kayu politeknik. Meja ini juga boleh dilipat dengan menggunakan pendakap lipat meja yang mempunyai pengunci sendiri yang boleh menyokong dan menguatkan kaki meja dalam 90 darjah. Dalam projek ini, jumlah kos meja sisi Mejikar berharga di bawah RM 78.00. Oleh itu, ia berjaya menghasilkan meja sisi katil dengan harga yang berpatutan.

Katakunci : meja sisi katil, bahan kayu terpakai, harga berpatutan.

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Appendix 1 – Gantt Chart

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CHAPTER 1 - INTRODUCTION

1.1 Project background



Figure 1: Common bedside table in bedroom.

Bedside tables are one of the most common pieces of furniture in most bedrooms today. Bedside tables are usually small and may have drawers, cabinets, a combination of drawers and cabinets, or even a simple side table design. In addition, the bedside table has become a valuable repository for various things, such as placing a small lamp, book, alarm clock, a glass of water, your glasses, phone, or anything else on the bedside table. A desk with drawers or cabinets can store more things like medicine, hairpins, and flashlights (Christensen, 2022).

Bedside tables can also be made from various materials. The most common option used to make a bedside table is wood or pressed wood. The price range is different, from very expensive engraved or detailed affairs that will cost more than \$1000 US Dollars (USD) or a simple new pressboard type for about \$50 US Dollars (Christensen, 2022).

1.2 Problem statement

Bedside tables designed in the market are primarily large, heavy, and expensive. Therefore, in this project a lighter small bedside table 50 cm in width and 30.8 cm in length, and also low price because it is made from used materials. Besides that, the bedside table was designed with foldable legs because most of customers feedback more prefer a foldable bedside table. After all, it was easy to store, and has a compact shape.

1.3 Objective

To produce a bedside table from used wood and polypropylene rope.

1.4 Scope of the project

The size of this project is 50 cm x 30.8 cm x 39.5 cm. A wood frame stitch with woven polypropylene rope about 200 cm long was used as a table top for this bedside table. Meanwhile, the blockboards and medium-density fibreboard (MDF) wood wastes were used as the bedside table frame and legs. All the materials were collected and manufactured in Wood Workshop at Polytechnic Sultan Salahuddin Abdul Aziz Shah.

CHAPTER 2 - LITERATURE REVIEW

2.1 History of side table

In the middle ages, when the French came up with a bedside table translated from French, it sounded like "stump"; in other versions, it meant "pole. "The primary purpose at that time was to keep the firearm close to the bed so that they could easily reach the firearm while sleeping and be protected from an enemy that may come from outside or inside the house. However, in the middle of the VIII century, the French started to appreciate the actual utility of small bedside tables, gaining more popularity. The first design was minimal and consisted of only one shelf and a drawer. Then, the modern bedside tables were produced differently from the previous ones, which are smaller and have only one or more closed shelves (Anonymous, 2020).

The design has a more sophisticated and stylish appearance because it creates a sense of comfort and interior fittings in their homes. The bedside's good quality and functionality can provide comfort and harmony to the homeowner. A flat surface can allow the customer to place the necessary items such as a clock, telephone, bedside lamp, unread book, or magazine near the bed (Anonymous, 2020).

2.2 The material and size of the side tables that are on the market

A standard bedside table width ranges from 18 to 22 inches or 45.72 to 55.88 centimetres. The height of a bedside table usually has a height according to the height of the bed, 23 inches to 28 or 58.43 cm to 71.12 cm; some also have a height of 30 to 35 inches or 76.2 cm to 88.9 cm and more if the bedside table is according to the size that has been set. Hence, the items on the bedside table are easy to reach or take (Anonymous, 2022).

The material used for the bedside table is wood, engineered wood, melamine-faced chipboard, wood veneer, medium-density fibreboard (MDF), plywood, walnut, solid wood, oak, ebony, and beech. There is also a bedside table using glass, crystal, and tempered glass materials. There are even steel and a combination of steel and wood. Apart from that, natural stone, marble, concrete, and cement-based materials also used in bedside manufacturing (Anonymous,2022).

2.3 Side table design in the market

EXAMPLE	PRODUCTS AVAILABLE IN THE MARKET	MATERIALS USED	SIZE OF PROJECT (MM)	WEIGHT OF PRODUCT (KG)	COMPARISON PRICE (RM) In the market
A (BURVIK side table from Ikea.com.my)	1	Polyamide plastic, iron	45x38	2.72	RM 176.00
B (ELINA side table from furnituredirect.co m.my)	À	MDF,veneer, Malaysian oak	40x40x50.5	7.6	RM 180.00
C (Metal Base Sage Frost from athome.com)	Ð	Wood/Uphoistered	45x45x38	22.0	RM235.68
D (End side table with wheels from cdiscount.com)	1	MDF, stainless steel,wheel	40x30x65	3.65	RM 161.52

Table 1: The price, material, size and weight of side tables sold in different market.

Table 1 shows the several types of bedside table designs along with size, price, material, and weight. For A is a Burvik side table from IKEA; the material used are polyamide plastic and iron. The size is 45 cm x 38 cm, and the weight for this side table is 2.72 kg, priced at RM 176.00. For B is an Elina side table from furnituredirect.com made from medium-density fibreboard (MDF), veneer, and Malaysian oak. The size is 40 cm x 40 cm x 50.5 cm with a weight of 7.6 kg, and the price is RM180.00. For C is a Metal base sage frost from athome.com that was made from wood and upholstered with size 45 cm x 45 cm x 38 cm, and the weight is 22.0 kg. The price for this side table is RM235.68. Lastly, for C, the End side table with a wheel was made from medium-density fibreboard (MDF), stainless steel with a plastic wheel size of 40 cm x 30 cm x 65 cm. The weight for this side table is 3.65 kg, with a price of RM161.52 (Aprodz, 2019).

2.4 Advantages and disadvantages of having a bedside table

2.4.1 Advantages of bedside table



Figures 2: The bedside table functions as a place to put a various thing.

The most apparent benefit of a bedside table, as shown in Figure 2, is providing a place to put various things close to the users, such as lamps, alarm clocks, eyeglasses, and books. Another advantage of having a bedside table is help to improve the bedroom environment. A well-chosen bedside table can complement bedroom furniture and decoration of the bedroom. The bedside table, with storage, can help to reduce the room's untidy condition (Benton, 2022).

The bedside tables also come in a variety of designs and are made from different materials, including wood, metal, and even plastic. It is also provided in various colours and finishes so that customers can match the bedside table in their bedroom (Benton, 2022).

2.4.2 Disadvantages of bedside table

There are some disadvantages of bedside tables that should be considered before buying furniture for the bedroom. Firstly, the bedside tables are expensive. This is especially true if buying high-quality furniture. However, buying cheaper furniture may not last long due to the quality of their materials. Secondly, it may take up much space in the bedroom and is sometimes challenging to match with other furniture in the bedroom (Benton, 2022).

CHAPTER 3 – METHODOLOGY

3.1 Questionnaires for Bedside Table

3.1.1 Aim of Questionnaires

The questionnaires developed in this study aim to know the customer's early expectations about the usage and the proper design of the Mejikar bedside table.

3.1.2 Method of questionnaires development and data analysing

The questionnaires were constructed using Google Forms, as referenced in Appendix 2. About ten (10) questionnaires were constructed that focused on the importance of the bedside table, price, materials, and features. Our survey target is only 70 respondents, and it was distributed via WhatsApp to several chat groups using the available link. The data were analyzed using the percentage (%) in excel software. Five (5) scales were used in this questionnaire, such as 1 (Totally agree), 2 (Agree), 3 (Satisfactory), 4 (Disagree), and 5 (Totally Disagree). Respondents will choose the scale that satisfies their expectations.

3.2 Selected materials for building the project

3.2.1 Pine wood



Figures 3 (left) and 4 (right): Pine wood can be used for small furniture also it has beautiful wood grain.

Pine trees are classified as softwood trees, which implies their wood is softer than that of hardwood species. As a result, pine trees are found worldwide in the United States and other countries like Malaysia, Russia, Europe, and China. As a result of its high degree of rigidity and stress resistance, pine is a popular choice for many types of furniture. Its softness makes it simpler to deal with during the furniture-building process. Pine was the wood of choice for Colonial, rustic, and craftsman-style furnishings for centuries. Fortunately, this is changing, as pine is used for many furniture designs, including everyday items (Anonymous, 2021).

3.2.2 Polypropylene straps

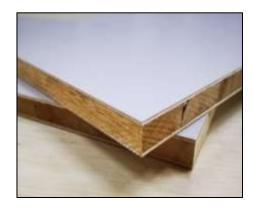


Figures 5 (left) and 6 (right): Polypropylene straps are strong enough to be used on small furniture such as outdoor tables and chairs.

Polypropylene or PP straps are the most common straps used in many industries. This strap is considered economical and can be used in many applications. Polypropylene was specially designed for light to medium-heavy loads and has excellent performance under normal conditions because properties such as breaking strength, elasticity, and tension loss are sufficient for many applications. It is available in different widths, thicknesses, compositions, and colours and can be easily printed with, for example, warnings, quality marks, or marketing messages (Asmarines, 2018).

3.2.3 Blockboard





Figures 7 (left) and 8 (right): Blockboard is also widely used in furniture making because of its cheap price and its lightness.

Blockboard is a product similar to plywood, which has a core made of softwood strips. Blockboard is made from solid blocks of wood and then sandwiched in a layer of wood veneer using a variety of chemicals and glued together under high pressure. It is better than particleboard and medium-density fibreboard (MDF) because blockboard has good dimensional stability even when it is exposed to moisture and exhibits high resistance to warping or twisting. Nowadays, there are many applications of blockboard for indoor and outdoor furniture, such as making bookshelves, benches, heavy top tables, sofas, flooring, and interior decoration (Scarlett Wu, 2019).

3.2.4 Medium-density fibreboard (MDF)

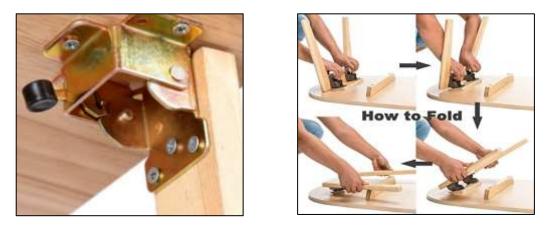


Figures 9 (left) and 10 (right): Many people use MDF for their furniture.

MDF is composted from wood mill waste, mainly sawdust and wood shavings, which is ground into a fine powder, dried to remove moisture, and mixed with resin and wax before being pressed into flat, rigid panels. MDF is unlike plywood, as it does not have the appearance of wood grain and instead has a consistent light brown colour with no visible texture or pattern. MDF is also much harder, smoother, and denser than plywood and does not have any voids, knots, or splinters. Most MDF is sold from home centres and lumber yards in 4x8 feet. Most MDF thicknesses are ½ inch and 3/4 inch, and MDF is also available in ¼ inch thickness, but usually only in 2 x 4 feet. MDF is also moisture-resistant and fire-resistant, although it usually needs a special-ordered (Joseph Truini, 2020).

Folding table hinges are suitable for limited spaces such as kitchens, laundry rooms, grocery stores, recreational vehicles (RV), boats, warehouses, industrial garages, maintenance storage, and office or residential storage. The installation method is straightforward attaching the folding table hinge to the table leg or the surface to be folded. For security, these hinges feature a spring-activated "safety lock" that ensures stability by locking when the table or work surface is in the open position. When the table or work surface is not in use, press the latch and fold it down, that can save on your room space (Joseph Truini, 2020).

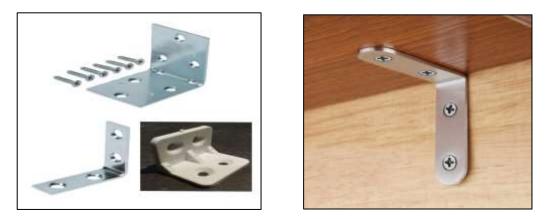
3.2.5 Folding table hinges



Figures 11 (left) and 12 (right): Folding table hinges and their usage.

Folding table hinges are suitable for limited spaces such as kitchens, laundry rooms, grocery stores, recreational vehicles (RV), boats, warehouses, industrial garages, maintenance storage, and office or residential storage. The installation method is straightforward attaching the folding table hinge to the table leg or the surface to be folded. For security, these hinges feature a spring-activated "safety lock" that ensures stability by locking when the table or work surface is in the open position. When the table or work surface is not in use, press the latch and fold it down, that can save on your room space (Chengtan, 2022).

3.2.6 L bracket



Figures 13 (left) and 14 (right): The types of L Bracket also the main function of the L bracket.

L Bracket is a bracket that can strengthen the right angles and is usually used to reinforce the cabinet dan shelf units. The L Brackets are also available in a variety of sizes and even have many methods to reinforce them. L Bracket can also use to connect two pieces of wood or steel. Most L brackets are made from steel or aluminium and plastic. L Brackets are very commonly used in construction. The L bracket can provide additional support to the furniture and reduce the bending or warping condition if used for the heavyweight (Journeyman, 2020).

3.2.7 Lacquer clear gloss

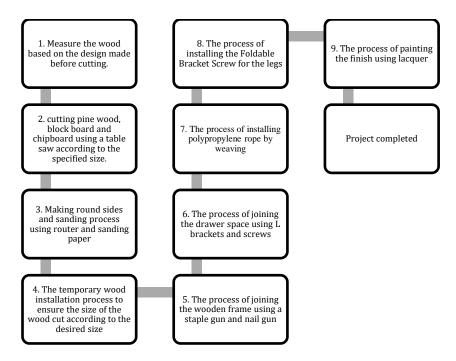


Figures 15 (left) and 16 (right): The usage of Lacquer clear gloss.

Lacquer is a coating commonly used for furniture, guitars, and wooden sculptures. It allows wood-based furniture or objects to be matte, glossy, or resinous and comes in various transparent or coloured styles. The precise type can give objects a slightly yellow appearance, while the coloured variety will give the desired hue. Its primary function is to protect the object's surface from moisture, oils such as from hands, sunlight, and bacteria and fungi that can form on wood when it is wet. It will dry quickly after it is applied and produce a long-lasting finish. The Lacquer was used because of its durability, colour, and chemical construction (Daw ,2022).

This type of Lacquer takes a long time to dry because the oxidation process is drastically slower than the other finishes in the market today. The easiest way for the lacquer coating to be applied is by spraying, but it can also be applied with a brush or wiped with a cloth. Only natural bristles can be used when using a brush, and when wiping, you should use a clean or cotton cloth. When the spraying method is used, care must be taken because, with these measures, the Lacquer can be used uniformly, and it will not show signs of feathering or running caused by excess Lacquer being used (Daw, 2022).

3.3 Flowchart MEJIKAR bedside table making process



Figures 17: The diagram shows the manufacturing of Mejikar bedside table.

The flowchart in Figure 17 shows the Mejikar bedside table manufacturing process. Firstly, the wood waste material was collected from the wood workshop; then, the wood was measured before cutting for the wood selection process. The only wood in good condition was used for this project. Afterward, a table saw cut the wood into the desired size. The table top was made of a round shape by using a router in order to ensure the safety of our bedside table.

A temporary bedside table installation was done to ensure that each side table part had a specified size. Then. Joining the frame was done using a staple gun, and the L brackets were used for the drawer installation process. After completing the process, the table top was done using a propylene rope and installing the folding bracket to the table legs. After all the above processes, the finishing process was done by using the Lacquer to ensure the product was shiny and also could protect the wood surface.

3.4 Product sketch

3.4.1 Product final sketch

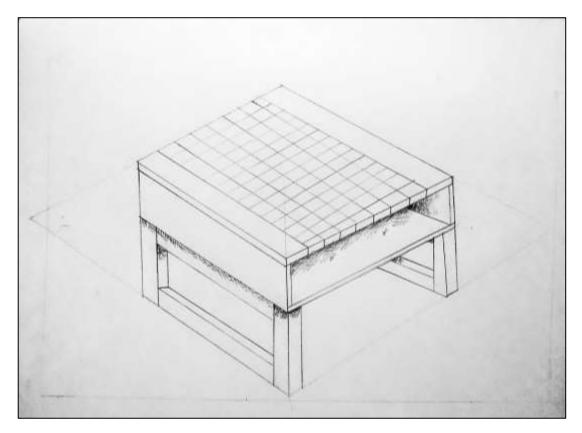


Figure 18: The initial sketch of Mejikar side table.

The diagram in Figure 18 was an initial sketch of the Mejikar bedside table. The product was designed where the top surface is a mat woven from polypropylene straps, and the table legs can be folded. Therefore, the name Mejikar is taken from the combination of table and mat.

3.4.2 CADD drawing of orthographic projection

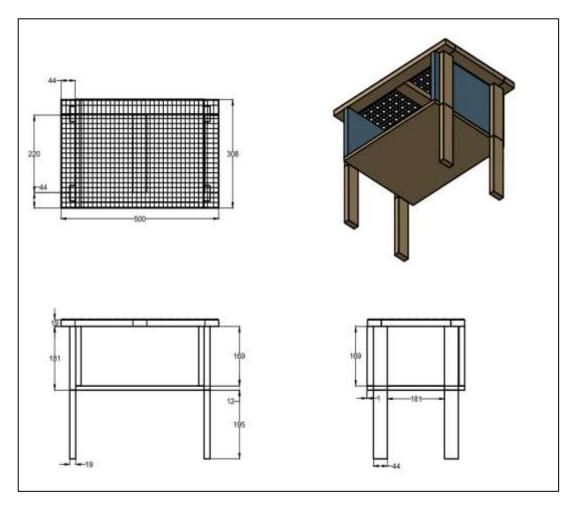


Figure 19: The diagram of the actual size and orthographic of the Mejikar bedside table produced using AutoCAD software.

The diagram in Figure 19 shows the actual size and orthographic of the Mejikar bedside table. The size of the Mejikar bedside table length is 500 mm, and the width is 308 mm. Also, the height from the floor of the Mejikar bedside table is 395 mm. The size of our Mejikar bedside table considers a standard size and suitable for placing beside the bed.

3.4.3 The final result of CADD drawing of Mejikar bedside table.



Figure 20: The diagram above shows a model of a Mejikar side table placed by the bed.



Figure 21: The diagram shows a model of a Mejikar side table where the legs are folded and placed under the bed.

Figures 20 shows that the Mejikar bedside table was placed beside the bed, and Figure 21 shows the specialty of the Mejikar bedside table, which has folded table legs, is easy to store under the bed and can save space in the bedroom.

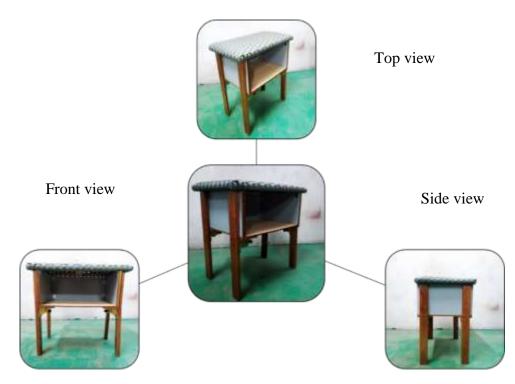
3.4.4 Bill of materials

Type of material used	Size	Amount of material used	Price
Wood	Pine		
Pine/MDF/blockboard	o 22x4.4x1.9cm	3	
	o 50x4.4x1.9cm	2	
	o 34.7x4.4x1.9cm	4	None
	MDF		None
	• 41.2x30.8x1.5cm	1	
	Blockboard		
	o 30.9x16.9x1.9cm	2	
	o 37.3x16.9x1.9cm	1	
Screws	o 6mmx5/8" 20pcs	76	RM 11.20
	• 8mmx1" 20pcs	8	RM 3.00
L brackets	Plastic		
	o 25x20x20mm	4	RM 0.80
	Steel		
	○ 16x40x40mm	3	RM 1.80
Foldable support	o 75x62x55mm	4	RM 22
brackets			
Polypropylene straps	Width 1.4cm	one roll	RM 18.50
TOA lacquer clear	-	one can	RM20
gloss			
TOTAL	-	110	RM 77.30

Table 2: The cost of purchasing our materials used for the manufacture of Mejikar side tables.

Table 2 shows the bill of materials involved in this project which only cost around RM 77.30. The wood wastes consider free of charge because they are only collected from Shah Alam Polytechnic Wood Workshop.

CHAPTER 4 – RESULT AND DISCUSSIONS



4.0 Mejikar Table Discussions.

Figure 22: The picture above shows our actual project with a top, front, and side view.

The MEJIKAR side table, as shown in Figure 20, is made from pine wood, blockboard, and medium-density fibreboard (MDF). The table top used propylene straps because the strap structure is strong, resistant to friction, and sold at a low price of around RM 20 for one loop. The table leg is used as a folding table bracket, and it has a self-locking to keep the side table stable and robust when the leg of the table is opened. The height of the MEJIKAR side table is 39.5cm, and the width and length are 50 cm and 22 cm, respectively. Therefore, this size is suitable to be placed next to the bed based on the literature review; the bed height is usually 58 cm, including the mattress.

4.2 The Advantages and Disadvantages of MEJIKAR Bedside Table

The advantage of this MEJIKAR bedside table is that it has a spacious drawer around 37.3 cm in length and 27.1 cm in width. This wide drawer allows users to put much of their stuff on this MEJIKAR bedside table. This bedside table also considers not too heavy because made from engineered wood waste. Another advantage of this MEJIKAR bedside table only incurred a production cost of around RM78.00.

Although this MEJIKAR bedside table has its advantages, it also has some disadvantages. The bedside table is less stable because the table top wood frame needs more support and prevents the propylene rope from having a little bending condition. The risk of severe damage is relatively high if it falls or is struck because the bedside table was only installed with screws and a nail gun.

4.2.1 Feedbacks from Questionnaires

Demography	Questions	Findings
Gender	Male	64%
	Female	35%
Age	20-30 years old	81%
	30-40 years old	7%
	>40 years old	11%
Marital Status	Married	18%
	Unmarried	77%
	Widow	4%
Jobs	Private sector	7%

Table 3: Demography of respondents involved in this study.

Public sector	31%
Student	57%
Others	17%

Table 3 shows the results and findings from our questionnaires, and the most the gender, males who are 64% and females at 35%. For the age group, the highest is 20-30 years old, which is 81%, and the second most are 30-40 years old, and the last is 40 years old and above, which is 11%. As for the marital status, the highest is unmarried, 77%, and the second highest is married, 18%, and the widows are only 4%. After that, the most respondents involved in this study were students, who contributed about 57%, the secondary public sector worker, who was 31%; and the private sector worker contributed 7%. The other job is only 17%. Most of the demographic respondents involved in this project are male, and the age group is 20-30 years old; unmarried status was dominant, and most are students.

No.		Findings (number of respondents and percentage)									
	Questions	1 Totally Agree	%	(n 2 Agree	with the second	of responder 3 Satis- factory	nts and %	percentage 4 Disagree	*) %	5 Strongly disagree	%
1	Do you agree that side tables are part of home furniture?	11	15.7	13	18.5	14	20	25	35.7	7	10
2	Do you prefer a light but durable side table?	18	25.7	8	11.4	11	15.7	22	31.4	11	15.7
3	Do you agree that solid wood is better than composite wood for side tables?	10	14.2	13	18.5	19	27.1	20	28.5	8	11.4
4	Do you prefer side tables that have wheels?	12	17.1	13	18.5	15	21.4	23	32.8	7	10
5	Can a side table that has multiple functions (multi- function) attract your attention?	15	21.4	10	14.2	9	12.8	24	34.2	12	17.1
6	Are pull-out side table drawers better than pull-up table drawers?	14	20	10	14.2	16	22.8	23	32.8	7	10
7	Is a medium-sized side table suitable for your home?	12	17.1	14	20	8	11.4	25	35.7	11	15.7
8	Are side tables with curved corners safer than side tables with square corners?	16	22.8	9	12.8	15	21.4	18	25.7	12	17.1
9	Do you think it's appropriate if the side table uses finishes such as clear and sealer?	17	24.2	10	14.2	8	11.4	24	34.2	11	15.7
10	Is a side table that costs RM 400 or less suitable for your budget?	10	14.2	14	20	17	24.2	23	32.8	6	8.5

Table 4: The percentage of Questionnaires Finding Obtained in This Study.

Table 4 shows the number and percentage of respondents' feedback from the questionnaires. In the first question, the percentage of strongly agree to satisfactory is only 54.2%, and disagree to disagree strongly is only 45.7%. About 54.2% of respondents agree that side tables are a part of their home furniture. As for the second question, only 52.8% agreed, and 47.1% disagreed. The respondents agreed because they wanted a light and durable bedside table so that it would be easy for them to move and change the position of the side table arrangement for their new house in the future. Those who disagree may want the side table only in one place. For the third question, only 59.8% agreed that solid wood is stronger than composite wood, and only 39.9% disagreed because they may think solid wood is more expensive than the composite wood. In the fourth question, 57% agreed with the side table with wheels because they want a side table that is easy to move wherever they want. Only 42.8% disagreed because they like the bedside table to stay in one position. After all, the wheeled bedside table might be unstable and could injure the children. As for the fifth question, 48.4% agreed because the multi-function side table can make it easier for users, such as a side table that can be changed to a large table. Those who disagreed were only 51.3% because the multifunction side table may be expensive and complicated for some users to use it.

For the sixth question, only 57% agreed because a side table with a pull-out drawer is more accessible than a side table with a pull-up drawer. Only 42.8% disagree because the pull-up side table drawer looks more different and unique. As for the seventh question, only 48.5% agreed because it is possible that their room is wide enough to fit a medium-sized side table and only 51.4% disagreed because a medium-sized side table would narrow the space in the bedroom and make room for other furniture difficult. As for the eighth question, only 57% agreed because the side table with round edges is safer and reduces injuries when sleeping. Those who disagreed were only 26.8% because the side table with round sides reduces the surface area of the side table, and items are likely to slip easily. As for the ninth question, only 49.8% agreed because consumers prefer shiny furniture, and even they know that this finishing layer can protect the furniture from wood pests and make it resistant to fungus. Only 49.9% of

respondents may think this finishing layer is toxic or harmful to the users' health. For the last question, 58.4% of respondents prefer the affordable price based on their budget for a bedside table for their new home. However, about 41.3% of respondents are never concerned about spending more on expensive furniture.

Vol	Items	Respondent Expectations	Mejikar Table Characteristics
1	Price	Cheap and reasonable price below than RM100.00	/
2	Bedside	Can be folded	/
	characteristics	Have a drawer	/
		More lightweight and flexible	/
		Safety issues	/
		Modern, attractive and ergonomic design	X
		Suitable size of table top	/
		More stable	X
		Use light materials but long lasting	X
		Attractive colour	X
		Have an electric socket at the bedside	X
		Easy installation	/
		Have a glass on the table top	/
		Water resistant	X
		Use a solid wood	X
		Have a locked drawer	X
		Have a mirror	X

Table 5: The Respondents Perspective about the design of Mejikar Bedside Table.

Table 5 shows the respondents' perspective on the design of Mejikar table. The Mejikar table only fulfils 8 / 17 items or about 47% of characteristics from customer expectations. Most respondents suggested that a bedside table must be lightweight, can be folded, and be sold at a lower price. Therefore, in this project, the Mejikar side table was successfully partially designed as suggested by the respondents.

CHAPTER 5 - CONCLUSION AND RECOMMENDATIONS

5.1 Conclusions

- The project needs a new design.
- New design could attract customers to buy.
- Staff capability problem.
- The side table needs to be in good condition for daily use.

5.2 **Recommendations**

- Please make a new design and multipurpose it.
- Do more questionnaires before and after the project.
- The side table needs to be stable, especially on top.
- The side table needs to be compatible with the market price.

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APPENDIX 1

Minggu / Aktiviti Projek	M1	M2	ма	M4	M5	M6	M7	MB	M9	M10	M11	M12	M13	M14	M15	M16
Mengemas kini data soal selidik dan membeli bahan- bahan projek	HIRCHILS-LANK															
Mengumpul bahan serta membuat lakaran pecah saiz sebelum memotong kayu			RECMEMENT	AD BAZLI DIN NIK	HAZMEN											
Mengemas kini ' draft report ' kepada penyelia				NIK MURANA NIK HAZIMAN												
Pembentangan 1 Projek Akhir 2022																
Mengukur saiz kayu dan melabelkan kayu serta membuat pemotongan kayu mengikut lakaran pecah saiz .																
Menipiskan serta melicinkan permukaan kayu yang dipotong																
Menyambung rangka 'table top' untuk membuat sulaman plastik polyspoliena.								NIK MARAAAAA NIK HAZMAN								
Sambung proses menyulam 'table top'									AD BAZLIBIN							
Menyambung bahagian-bahagian kayu dan melengkapkan proses pembuatan meja sisi 'MEJIKAR'																
Membuat proses akhir iaitu 'finishing' kepada projek dengan meletakkan lapisan 'laquer'										IAD BAZIJ BIN NIK						
Pembentangan Akhir ' Final Year Project' 2022											NIK MEHAANIN NIK HAZIMAN					
Pembentangan Kejuruteraan Awam												NRC MEHICAN	AD BAZLI BIN NIK			
																erancangan elaksanaan

APPENDIX 2

Bahagian B : Soalan Untuk Responden Sila berikan penilaian anda berdasarkan skala di bawah :						
1. Sangat setuj 2. Setuju 3. Memuaskan 4. Tidak setuju 5. Sangat tidal	ić G					
1. Adakah anda b kediaman?	persetuju bahawa n	neja sisi merupak	kan sebahagian (daripada perabot	•	
	1	2	3	4	5	
Row 1	0	0	0	0	0	
2. Adakah anda l	ebih suka meja sisi	yang ringan teta	pi tahan lama? *			
	1	2	3	4	5	
Row 1	0	0	0	0	0	
3. Adakah anda b sisi?	oersetuju kayu kera	s (solid wood) l	ebih baik dari ka	yu komposit untu	ık meja 🏾 *	
	1	2	3	4	5	
Row 1	0	0	0	0	0	
	O ebih suka meja sis	O yang mempunya	ai roda? *	0	0	
	O ebih suka meja sis 1	O i yang mempunya 2	ai roda? * 3	4	5	
				4	0 5 0	
4. Adakah anda k Row 1 5. Adakah meja s		2	3	0	0	
4. Adakah anda k Row 1	1	2	3	0	0	

itas?	eja sisi yang boleh		aan ah		
	1	2	3	4	5
Row 1	0	0	0	0	0
. Adakah meja s	sisi yang bersaiz se	ederhana sesuai (untuk diletakkan	dirumah anda? *	
	1	2	3	4	5
Row 1	0	0	0	0	0
). Adakah meja s mpat sama?	isi berbucu melen	gkung lebih selar	nat berbanding r	neja sisi berbucu	segi •
	1	2	3	4	5
Row 1	0	0	0	0	0
9. Adakah anda r sealer?	rasa sesuai jika me	ija sisi mengguna	ıkan kemasan (fi	nishing) seperti o	lear dan 🍍
	1	2	3	4	5
Row 1	0	0	0	0	0
10. Adakah meja	sisi yang berharga	a RM 400 ke bawa	ah sesuai dengar	n bajet anda? *	
	1	2	3	4	5
Row 1	0	0	0	0	0
	penambahbaikan	meja sisi *			