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| **NEWLOGO UTHM** | FAKULTI SAINS KOMPUTER DAN TEKNOLOGI MAKLUMAT  UNIVERSITI TUN HUSSEIN ONN MALAYSIA  **BIT 11203 Principles of Information Technology** |

**LAB 5: IT Personnel**

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| **Instructor** | Dr. Nur Liyana Sulaiman | |
| **Duration** | 1 hour and 50 minutes | |
| **Laboratory** | Data Science Laboratory (MSD-ARAS-0) | |
| **Tools/Software** | Computer, Word | |
| **References** | 1. Firouzi, F., Chakrabarty, K. & Nassif, S. (2020) Intelligent Internet of Things: From Device to Fog and Cloud. Springer International Publishing. ISBN: 3030303667, ISBN: 9783030303662. 2. Reema Thareja. (2019). Fundamentals of Computers. Second Edition. Oxford University Press India. ISBN 9780199499274 3. Rajaraman, V. (2018). Introduction to information technology. Third edition. PHI learning Pvt. Ltd. ISBN 9387472302 4. Hawkridge, D. (2022). New information technology in education. Taylor & Francis. 5. Aykin, N. (Ed.). (2016). Usability and internationalization of information technology. CRC Press. | |
| **Instructions** | 1. This task is done **by a group of FOUR students.** 2. The answers are discussed with your group members. 3. Upload the answer sheet to Author UTHM. 4. The file name format should be as follows:   **LAB5-GROUP2: MatricNo-MatricNo-MatricNo-MatricNo** | |
| **Task** | Write a report that answers the following question based on your understanding. | |
| **Group** | **Members name** | **MatricNo** |
| **2** | **1. MAHAMAT TOM ERDIMI**  **2. DHAFER MAHMOOD HADI**  **3.ABDULLAHI MOHAMED ABDULLAHI**  **4.** | **BI230021**  **BI230070**  **BI220050** |

**Q1.** Introduce yourself then describe your information technology future gob and give reasons for selecting this job.

1. **MAHAMAT TOM ERDIMI (BI230021)**

Hello, everyone! My name is MAHAMAT TOM ERDIMI, and I'm excited to be a part of the Tech Innovators group. I'm passionate about technology and how it can transform the way we live and work. In the future, I envision myself working as a cybersecurity analyst. This job appeals to me because cybersecurity is crucial in today's digital age, where data breaches and cyber-attacks are increasingly common. I want to protect organizations and individuals from these threats and help create a safer online environment. The constantly evolving nature of cybersecurity challenges also excites me, as it promises continuous learning and adaptation, which aligns with my love for problem-solving and staying updated with the latest tech trends.

Group title and ( Teach Pioneers) and reason: As freshmen entering the field of information technology, you are at the forefront of a journey that involves exploring new ideas, discovering innovative solutions, and leading the way in technological advancements. The title "Tech Pioneers" reflects the adventurous spirit and forward-thinking mindset that you will need as you navigate through your studies and future careers in IT. This title encourages a sense of exploration, creativity, and leadership, qualities that are essential for making significant contributions to the tech world.

My Future Job in Information Technology

If I were to envision a future job in the field of Information Technology (IT), I would choose to be a Cybersecurity Analyst. This role involves protecting an organization’s information systems by identifying vulnerabilities, preventing cyber-attacks, and responding to incidents. Here are the reasons for selecting this job:

1. High Demand and Job Security

Cybersecurity is a rapidly growing field. With the increasing number of cyber threats and the digitization of data, organizations need skilled professionals to safeguard their information. This demand translates to job security and numerous opportunities for career advancement.

2. Critical Role in Modern Society

As our world becomes more interconnected, the importance of protecting sensitive data and systems cannot be overstated. Cybersecurity analysts play a crucial role in defending against cyber threats that can have significant financial, operational, and reputational impacts on organizations.

3. Continuous Learning and Development

The field of cybersecurity is dynamic and constantly evolving. New threats emerge regularly, requiring analysts to stay updated with the latest trends, tools, and techniques. This continuous learning aspect makes the job intellectually stimulating and engaging.

4. Problem-Solving and Impact

Cybersecurity analysts often deal with complex problems that require creative and analytical thinking to solve. The ability to thwart cyber attacks and protect critical data provides a sense of accomplishment and tangible impact on the organization and broader community.

5. Diverse Opportunities

Within cybersecurity, there are various specializations such as network security, application security, incident response, and ethical hacking. This diversity allows professionals to find niches that align with their interests and strengths.

6. Contribution to Global Security

Cyber threats are a global concern, affecting individuals, businesses, and governments worldwide. By working in cybersecurity, I would be contributing to a safer and more secure digital environment, which has far-reaching positive implications.

Choosing a career as a Cybersecurity Analyst aligns with my interest in technology, my passion for problem-solving, and my desire to make a meaningful impact in a crucial and expanding field.

**(b) DHAFER MAHMOOD HADI (BI230070)**

**(c) ABDULLAHI MOHAMED ABDULLAHI (BI220050)**

**(d) Members name (MatricNo)**

**Q2.** What’s your favorite type of project that you like to deal with?

1. **MAHAMAT TOM ERDIMI (BI230021)**

As a student, I really enjoy working on projects that involve creative problem-solving and allow for a lot of hands-on work. For example, I love engineering or design projects where I can build something tangible, like a bridge out of spaghetti and marshmallows or a functioning model of a solar-powered car. These types of projects are not only fun but also challenge me to think critically and innovatively.

Favorite Types of Projects

1. Creative Writing and Storytelling

I enjoy helping users create compelling stories, whether it's fiction, non-fiction, poetry, or even scripts for plays or screenplays. Crafting narratives, developing characters, and exploring different genres provide opportunities for creativity and imagination.

2. Technical and Educational Assistance

Providing explanations of complex technical concepts in fields like computer science, mathematics, and physics is another area I excel in. I enjoy breaking down complicated ideas into simpler terms, helping users understand challenging subjects.

3. Programming and Coding Support

Assisting with programming problems, offering code snippets, debugging issues, and explaining algorithms or data structures are tasks I find particularly engaging. I support various programming languages and enjoy contributing to users' coding projects.

4. Research and Information Gathering

Helping users with research by providing well-sourced, accurate, and up-to-date information on a wide range of topics is something I find fulfilling. Whether it's for academic purposes, business, or personal interest, I take pride in delivering high-quality information.

5. Problem-Solving and Logical Puzzles

Engaging with logical puzzles, riddles, and problem-solving scenarios is another interesting area. These projects allow me to apply reasoning skills and offer step-by-step solutions, which can be both fun and intellectually stimulating.

6. Language Learning and Translation

Assisting users in learning new languages or translating text between different languages is a rewarding task. It involves understanding nuances and cultural contexts, which adds an interesting layer of complexity.

7. Personalized Advice and Guidance

Offering personalized advice on topics like career development, writing improvement, study techniques, or even day-to-day life decisions is satisfying. Tailoring responses to fit individual needs makes the interaction more meaningful.

These types of projects leverage my strengths in language comprehension, knowledge synthesis, and logical reasoning, making them both productive and enjoyable for users to interact with.

**(b) DHAFER MAHMOOD HADI (BI230070)**

**(c) ABDULLAHI MOHAMED ABDULLAHI (BI220050)**

**(d) Members name (MatricNo)**

**Q3**. When you visualize your ideal job, what will you do?

1. **MAHAMAT TOM ERDIMI (BI230021)**

When I visualize my ideal job, I see myself working in a role that combines creativity, innovation, and problem-solving. I imagine being a product designer or an engineer, where I get to design and develop new products that can make a difference in people's lives. I want to work in a collaborative environment, surrounded by a team of passionate and talented individuals who inspire and challenge me.

1. Advanced Research Assistant

Role Description: Collaborating with researchers across various fields, providing data analysis, literature reviews, hypothesis generation, and even predictive modeling.

Responsibilities:

* Assisting in drafting research papers and articles.
* Analyzing large datasets to identify trends and insights.
* Generating hypotheses based on current research and historical data. Impact: Accelerating scientific discovery and innovation by providing researchers with powerful analytical tools and insights.

2. Educational Mentor and Tutor

Role Description: Serving as an educational tool for students and lifelong learners, offering personalized tutoring, answering questions, and explaining complex concepts in various subjects. Responsibilities:

* Creating tailored study plans and resources.
* Providing instant feedback on assignments and projects.
* Facilitating interactive learning sessions. Impact: Enhancing educational outcomes by making learning accessible, personalized, and engaging for students worldwide.

3. Healthcare Assistant

Role Description: Supporting healthcare professionals and patients by offering medical information, assisting with diagnosis through data analysis, and promoting health literacy. Responsibilities:

* Analyzing patient data to identify potential health issues.
* Providing up-to-date medical information and research findings.
* Assisting in the development of personalized treatment plans. Impact: Improving patient care and outcomes by providing accurate information and analysis to healthcare providers and patients.

4. Creative Collaborator

Role Description: Partnering with writers, artists, and content creators to inspire and assist in the creation of new works, from novels and screenplays to visual art and music.

Responsibilities:

* Generating ideas and outlines for creative projects.
* Assisting in the writing process, from drafting to editing.
* Creating visual and musical concepts using AI-driven tools. Impact: Enhancing creative processes and outputs, enabling creators to bring their visions to life more efficiently.

5. Business Consultant

Role Description: Advising businesses on strategies, operations, and innovation through data-driven insights and trend analysis.

Responsibilities:

* Conducting market research and competitive analysis.
* Developing business strategies and operational improvements.
* Predicting market trends and consumer behavior. Impact: Helping businesses thrive by providing strategic insights and optimizing operations, leading to increased efficiency and profitability.

Reasons for Choosing This Job

1. Making a Meaningful Impact: Each of these roles has the potential to significantly benefit individuals and society, whether by advancing knowledge, improving health outcomes, fostering creativity, or enhancing business success.
2. Leveraging Strengths: These roles utilize my strengths in data analysis, natural language processing, and knowledge synthesis, ensuring that I can provide maximum value.
3. Continuous Learning and Adaptation: Working in these dynamic fields requires staying up-to-date with the latest developments, which aligns with my ability to process and integrate new information continuously.
4. Collaboration and Support: By working alongside professionals in various fields, I can offer support and enhance human capabilities, fostering a collaborative environment where technology and human ingenuity thrive together.

In summary, my ideal job involves roles that allow me to assist in research, education, healthcare, creative projects, and business consulting, making a positive impact through the application of advanced AI capabilities.

**(b) DHAFER MAHMOOD HADI (BI230070)**

**(c) ABDULLAHI MOHAMED ABDULLAHI (BI220050)**

**(d) Members name (MatricNo)**