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# TASK MANAGEMENT AND PRODUCTIVITY APP WITH DESKTOP ROBOT DISPLAY

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*Abstract:* **In student's lives, efficient task management and productivity are needed to complete multiple assignments. The study aims to provide students with tools to handle everyday tasks while engaging with a companion-like robot. Additionally, the study focuses to evaluate the acceptance level of effectiveness of the system with the use of TAM Theory. The researchers utilize of 5-point Likert Scale questionnaire. Furthermore, fifty (50) respondents are from different year levels in the College of Computer Studies. Respondents were asked to engage with the application and Pixie (the robot). As a result, most respondents accepted the Task Management and Productivity App with Desktop Robot Display after the evaluation. The result indicates that the system has a positive and beneficial impact on students.**

*Keywords:* **task management, productivity, companion-like robot, acceptance level**

## I. INTRODUCTION

Intelligence (AI) systems increasingly algorithmically mediate human lives and social robots are one of their emerging applications areas (Charisi et al., 2021). Productivity apps have emerged as the most popular categories of apps in recent years. Productivity apps have been demonstrated to offer three benefits: accountability, assessment, and improvement. However, some people may believe that it's effectiveness stems only from the placebo effect (Dhaliwal et al., 2021) Additionally, A Task Management and Productivity App with Desktop Robot Display is an application that aims to assist individuals in completing and carrying out their daily tasks more effectively. The system employs a robot that displays manage tasks, schedule events, set reminders, and track progress. The interface is simple and visually appealing, allowing users to navigate and access all its features easily.

Furthermore, social isolation, mental exhaustion, and being unproductive are the common problems students usually encounter. According to Al-Iraibi et al.(2022), there has been significant disruptions to students population' academic and social lives, such as the quick shift to online learning, new techniques for online evaluations, and modifications to workloads and performance standards, a decline in social connections, and concerns about one's future professional and educational paths. Moreover, the problem of handling their academic workload with other commitments and duties, including part-time employment, extracurricular activities and family obligations is one of the most frequent difficulties students confront. Stress, unproductiveness, and a lack of desire to study may arise from this.

Nevertheless, to address the issue of social isolation, mental exhaustion and unproductivity, a desktop robot is designed to be a user-friendly tool that assists users in managing their tasks schedule, setting reminders, adding notes, and a game feature. To address the challenge of managing academic workload, the Task Management and Productivity App with Desktop Robot Display can be programmed to assists users in working activities, and track their progress to ensure they are on track to meet their objectives. By providing personalized support and assistance to users, it is possible to help them manage their workload effectively, improve their learning outcomes, and ultimately, improve their overall learning experience.

Additionally, in recent years, productivity apps have grown in popularity. According to Dhaliwal et al.(2021), Any program that improves productivity and efficiency is referred to as a "productivity app". The phrase has taken on various meanings over time, ranging from tools that motivates users to produce more while finishing a task to those that shorten task completion times by streamlining the process. Many productivity tools lack features developed throughout the years, such as FacileThings , which focuses only on task managing and editing tasks, and ClickUp which also has a to-do list and stores work in one place. To make productivity tool more effective, the researcher proposed Task Management and Productivity Apps with Desktop Robot Display, which is unique in several ways. The proposed study has a task managing and productivity tool made explicitly for use in learning environment, and it will have capabilities intended to help students manage their workload and improve productivity that helps them with their overall performance in school. The proposed study has distinct features such as a list, note-taking, reminders, games, and capabilities that distinguish it from other

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existing robots, which makes it an innovative learning tool and a better productivity tool.

In addition, Arduino is used for the system's hardware components. A web server is added to control various aspects of the robot's functionality and serves as the API endpoint. Arduino has good-quality embedded systems and robotics community support for easier development. The main database management system for handling and storing data will be SQL. C is the primary programming language for scripting the robot. The front-end of the mobile web application is created using JavaScript. The theory implemented in the study is the Technology Acceptance Model (TAM). It imparts a structure and insights for evaluating user acceptance and behaviors toward adopting the technology.

Student's will highly benefit from the study. The Researchers develop the system to provide students with a valuable tool for managing their tasks and workload and improving their productivity. Student's academic performance will increase as a result of their increase effectiveness and efficiency in handling their assignments through the system. Additionally, robot can aid with social isolation problems among students.

Figure 1 and 2 shows entire flow, from the hardware to the web-mobile system The mobile system has productivity features that include notes, reminders, checklists and a game. The system has a trigger button that sends data from the system to the web server, which fetches its data through API. Additionally, with it, the LCD will be able to show the system's data. As well as the IPO, input includes consultation with the adviser, instructor, and student feedback. The researchers used the prototype model to build the proposed system, focusing on design and prototyping. A Task Management and Productivity App with a Desktop Robot Display was created as an output.

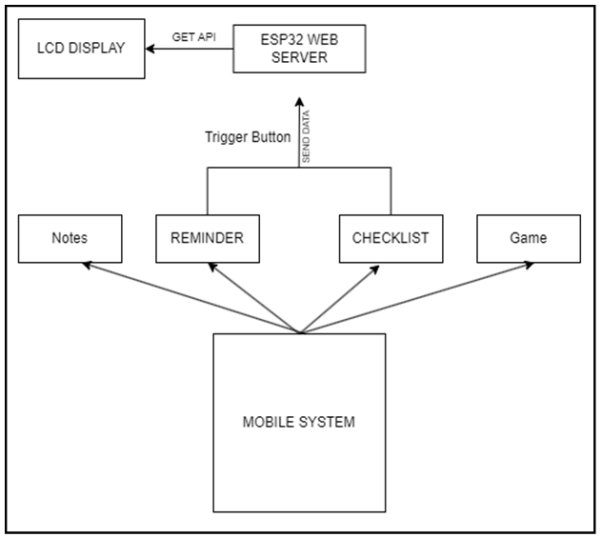


**Figure 1. Desktop Robot Framework**

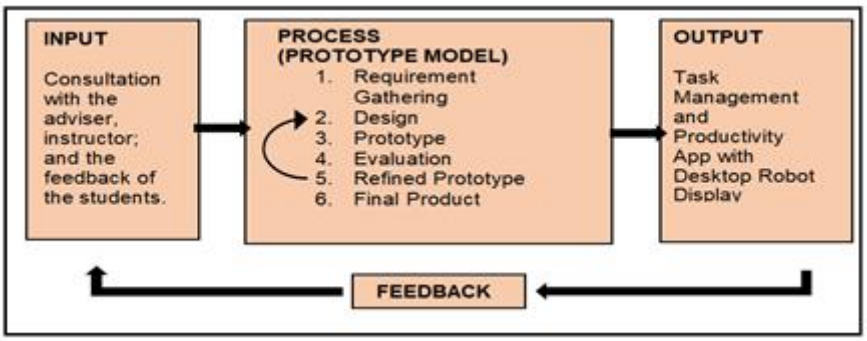


**Figure 2. Conceptual Paradigm using IPO Model**

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## II. LITERATURE REVIEW

This chapter's studies and literature offered context and theory related to the proposed study.

### 2.1 Companion Robot

A field centered on creating robots capable of social and emotional interaction with people. These robots are intended to support, entertain and companion human in a variety of contexts, including healthcare, education and entertainment. By analyzing existing sources and case studies, researchers will additionally discern elements that could help the advancement of this study.

Numerous companion robots have been presented to users through the market. For instance, Misekis et al.(2020) built a mobile robot platform called Lio that is capable of performing a wide range of complex activities. It has the ability to grasp and manipulate objects for use in homes and healthcare settings. Moreover, it functions independently within a preexisting setting.

Moreover, VectorConnect is a robot teleoperation system designed to mitigate the pandemic-related consequences of social separation on children. The robotics community has recently put on several ideas on how robot could assist humans in the event of a worldwide epidemic. Children should avoid social isolation for two reasons: first, it can cause loneliness; second, it might impede growth. Loneliness has been linked to higher death rates and can have detrimental impact on one's general health.

VectorConnect was created to interact with children, lessening the impact of social isolation during the pandemic. (Tsoi et al., 2020)

Another companion robot with similar attribution is the 'Range BLU (Orange Beloved Until), a well-thought-out personal entertainment partner. The robot is equipped with sophisticated machinery and multiple sensors to do simple tasks, recognize its surroundings, and react appropriately. Range BLU performs a variety of uncomplicated tasks in object management, application administration, and climate control. It does this by utilizing many communication protocols to accept human experience.

It can work as an entertainment partner regarding voice, face, and object recognition technology via the owner's smartphone. (Momtaz et al., 2019) Because these robots have the capabilities of social and emotional intelligence, they can provide personalized and engaging experience to users, improving their quality of life.

### 2.2 Technology Acceptance Model

Since the mid-1900s, robotics has continued to advance and is now an essential component of today's manufacturing sector. The most recent advancement in robotics move away from completely automated production processes that use robots and toward methods where people and robots work together. This implies that even if there is significant safety Although the human body has been safeguarded by margins up until now, an increasing number of businesses are creating collaborative workplace. Wherein a task can be completed simultaneously and cooperatively by humans and robots. (Nelles et al., 2016) This idea provides a five-step method from discovering new technology to confirming it. The next important step was the Technology Acceptance Model (TAM), developed by Davis in 1989 and which forecasts the acceptance and subsequent use of Information Technology. In particular, this model makes use of the key tenet that behavioral intention comes before actual activity. Consequently, behavioral intention is influenced by perceived usefulness and perceive ease of use. Perception of utility refers to "the degree to which a person believes that using a particular system would enhance his or her job performance".

On the other hand, perceived ease of use refers to "the extent to which an individual feels that utilizing a specific system would be without exertion (Nelles et al., 2016). Additionally, investigator Ghazali et al. (2020) reported that the initial TAM forecasts Individual Intentions to utilize technology depending on a number of important factors, such as perceived utility and perspective on using. Subsequently, TAM 2 sought to forecast user adoption behavior toward technologies employed in companies over time by highlighting social and cognitive elements such subjective norms demonstrability, voluntariness, and experience as critical variables. This study uses all of the major variables from the original TAM and one major variable from TAM 3--perceived enjoyment—to examine how well persuasive robots are accepted. Because of its strong theoretical foundation, extensive empirical backing for its exploratory capacity, and ability to forecast acceptance for a wide range of user populations, the Technology Acceptance Model (TAM) is regarded as the most well-known acceptance model and is utilized in many different domains. They do, however have concerns about TAMs as tools that can predict people's adoption of technology, as well as flaws in metrics that rely on user self-reporting and brief user exposure to the technology in question. Alternative approaches must be taken into account in order to comprehend and asses the requirements of older adult users with relation to their adoption of technology, particularly assistive robots (Shore et al., 2018).

## III. MATERIALS AND METHODS/METHODOLOGY

The following techniques and procedures were employed by the researcher to aid in the planning and development of the proposed system.

### 3.1 Research Setting

The researcher was carried out at St. Peter's College (SPC), an educational institution located in Iligan City; Lanao del Norte, during the 2023-2024 academic year. The users on

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the system were College of Computer Studies students. They were the initial survey questionnaire participant.

**3.2 Research Design**

The prototyping Model entails creating prototypes that serve as working models of the system. These prototypes are repeatedly tested, developed and enhanced until the final fully workable version is attained. Throughout the Development Cycle, this repetitive process enables the researcher to make flexible and efficient modifications in response to user feedback.

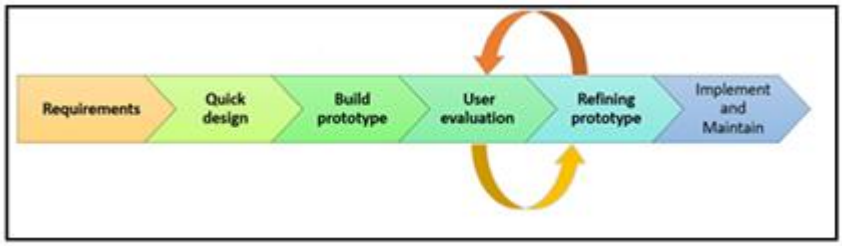


**Figure 3. Prototyping Model**

The Prototyping Model (Figure 3) was employed in the development of the suggested system. Moreover, Prototype consists of six separate stages. They are listed below..

**Phase 1: Requirements Phase**

The requirement analysis is the first step in the process At this point, the systems needs are described in considerable detail. For the system to advance, the technique ascertains the need, the problem, and the solution.

**Phase 2: Quick Design Phase**

Quick Design, often known as preliminary design, is the second phase. This completes the system's basic design. It is merely a draft design. It provides a quick overview of the possible outcome of the system. The prototype is improved upon. Quickly due to the arrangement.

**Phase 3: Building Prototype Phase**

Prototyping design is aided by the information provided by Quick Design. This is a truncated form of necessary system.

**Phase 4: User Evaluation Phase**

The recommended system is now provided to the users' preliminary assessment. It is useful in determining the models' benefits and drawbacks. Comments and advice were followed.

**Phase 5: Refining Prototype Phase**

The prototype incorporates the evaluation's remakes and suggestions. This stage will conclude once every requirement has been met. A final system is created based on the approved final prototype.

**Phase 6: Implementation and Maintenance Phase**

Before being put into use, the system is extensively tested after being developed using the finished prototype. Apply. Routine maintenance is performed on the system to reduce downtime and avoid major malfunctions.

**3.3 Physical Environment and Resource**

The hardware and software specifications for the Task Management and Productivity App with Desktop Robot Display were provided in this section.

**Hardware Requirements**

Desktop:

- Computer/Laptop – A computer is necessary for the desktop robot to be developed as it creates and tests the system and writes the code to enable the robot to perform its tasks. Additionally, handles the processing of the data and connectivity.
- LCD – One kind of display that runs on liquid crystal called a liquid crystal display (LCD).
- ESP32 Web Server – As an agent device connected to host MCU or as fully functional standalone system, it lessens the load on the core application processor's communication stack. The ESP32 may communicate with other systems to provide Wi-Fi and Bluetooth capabilities via its I2C/ UART or SPI/ SDIO interfaces.

**Software Requirements**

In terms of software, these are the things that friends and acquaintances who know how to make websites have told the researcher.

The following is the software needed to develop the system.

- Visual Studio Code – A streamlined code editor that facilitates development tasks including version management, task execution and debugging.
- XAMPP – A short form of Cross-Platform, Apache, MySQL, PHP and Perl. It is well-known cross-platform web server that enables code development and testing on a local web host.
- Arduino IDE – A software application used to program Arduino microcontrollers as needed for the board to be programmed.

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- JavaScript – A text-based programming language that allows the creation of an interactive web page and enables updating the content of the application/website, animation, etc.
- MySQL – A popular open-source relational database management system that can be used to develop productivity. Boosting desktop robot programs. Additionally, it is employed in data analysis and storage.
- PHP – is a favored general-purpose, open-source scripting language that works with HTML and is especially suitable for the building of websites.
- C – a very popular, straightforward, and versatile general-purpose programming language. A structured programming language that is machine-independent and widely used to create a wide range of applications.

**3.4 Tools and Techniques Used in the Study**
The methods and tools for visualizing the complete system were covered in this section, including the Use Case Diagram, Entity Relationship Diagram (ERD), Schematic Diagram and Context Diagram.

**Use Case Diagram**
Use case outline the anticipated conduct of interactions between the systems and the actor. One selected, use cases might be indicated by written or visual means.

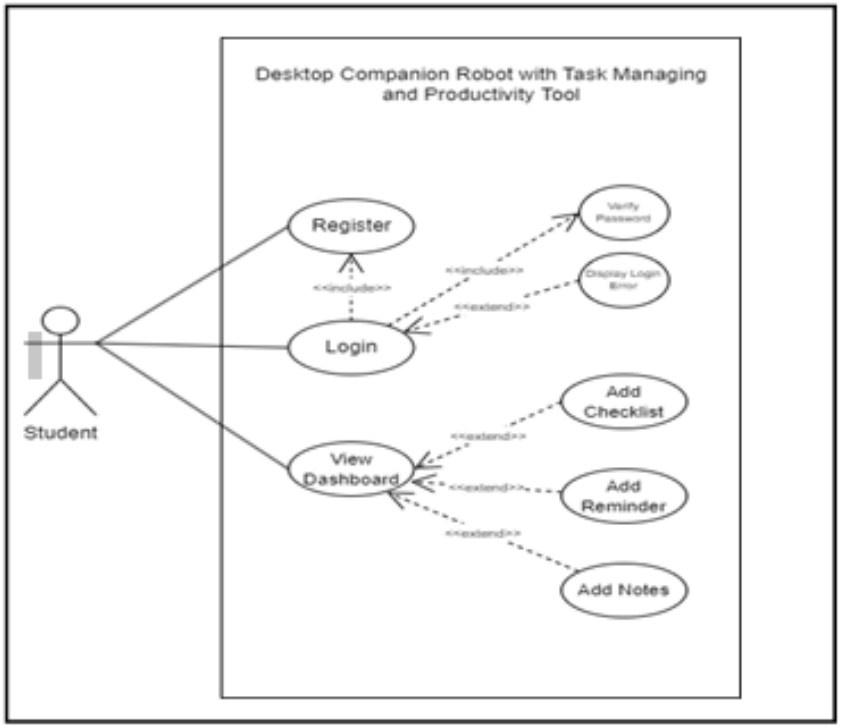


**Figure 4. Use Case Diagram**

As shown in Figure 4 the use case shows how students View and Manage the Mobile System. Where students can add and delete their Checklists. Set, Edit and Delete their Reminders. Add and Delete their notes. Afterward, students can view their Checklists, Reminders and Notes. The leading actor in this Diagram is the student. The student used the Mobile system to interact, manage and view their tasks. The mobile system acts as the central platform for accessing its features.

**Entity Relationship Diagram (ERD)**
A structural diagram used in database design in the entity-relation diagram (ERD). Different connectors and symbols found in an ERD help to view key systems data.

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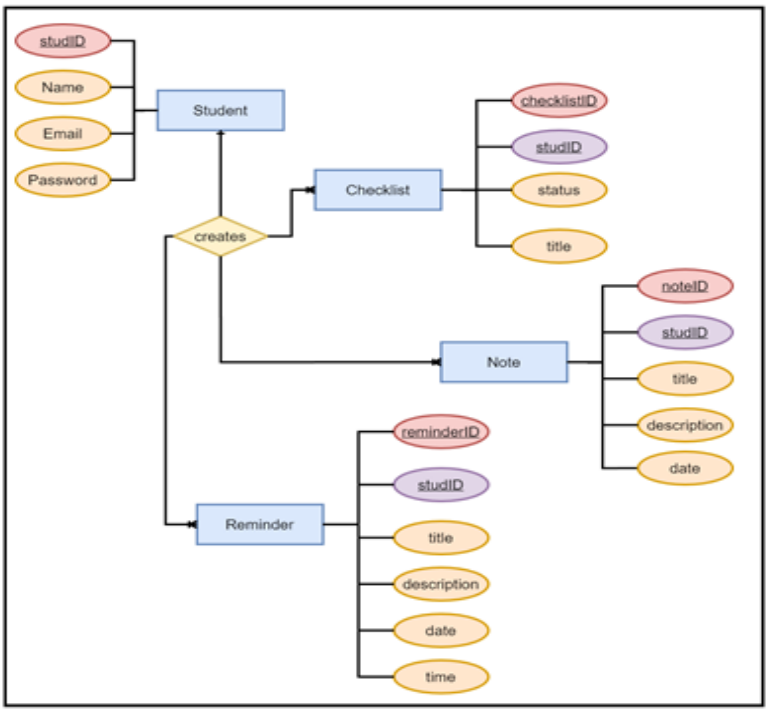


**Figure 5. Entity Relationship Diagram**

Consequently, the relationship within the system are depicted in Figure 5. In addition to the name, email address, and password that are kept in the database, the student acts as the entity and possesses the characteristics of study that function as the main key. Using the checklist as the main key, status, and title, students can design a checklist. The remaining properties are kept in the database; this also applies to Notes and Reminders, which have unique IDs. With the ERD, students can create checklists, notes, and reminders and associate them with their accounts.

**Schematic Diagram**

An ordered temporal succession of object interactions is depicted in sequence diagram. The objects in the scenario are shown, in addition to the communications required for the system's effective operation.

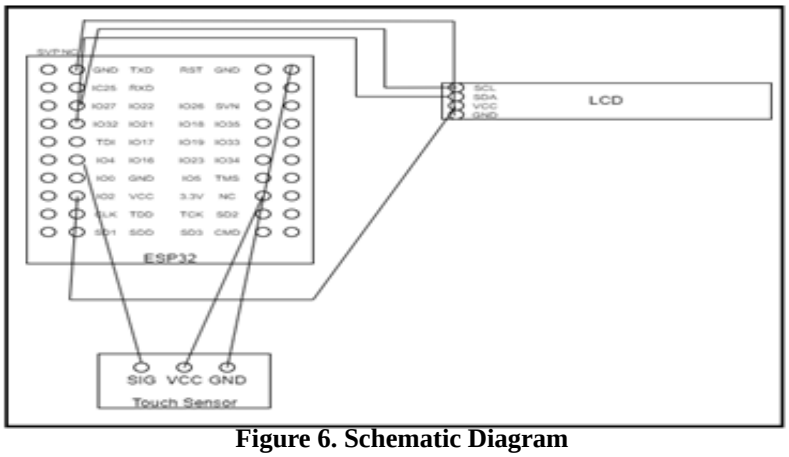


**Figure 6. Schematic Diagram**

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**Context Diagram**

A context diagram shows how an internal software system interacts with external things. It's an advanced a picture that succinctly, simply and clearly illustrates the entire system.

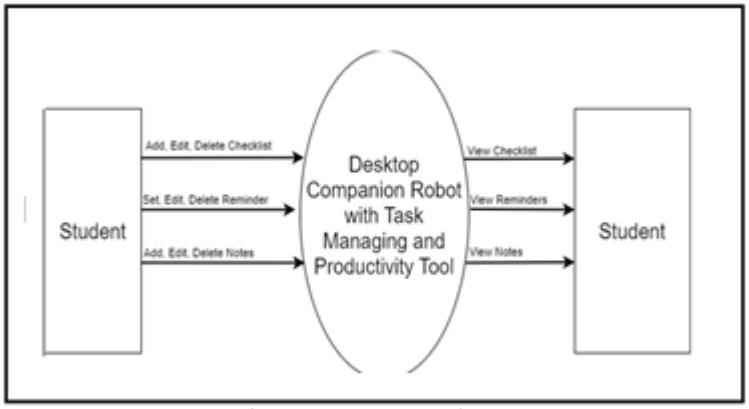


**Figure 7. Context Diagram**

Figure 7 illustrates how the students process the Mobile System. Where students can register and enter their personal information. Moreover, students enter their registered accounts. Upon successfully logging in, students can view their Dashboard as well as the student can Add Checklists, Reminders, and Notes. These steps will enable students to sign up, log in, access the Dashboard, add Checklists, Reminders, and Notes, and efficiently manage their tasks.

**3.5 Participants and Sampling Procedure**

The researchers collected data from the students at the College of Computer Studies at St. Peter's College, Iligan City. The researchers gathered fifty (50) respondents ranging in age from nineteen (19) to twenty-seven (27). Participants are first-year students up to fourth-year students.

## IV. RESULTS AND DISCUSSION

This section includes the project's implementation, the study's findings, and a brief description of the system's evaluation. The look of the system and an explanation of the information obtained from the questionnaires given to the respondents are also included in this chapter.

**4.1 Final Product**

This is the entire system showcase.

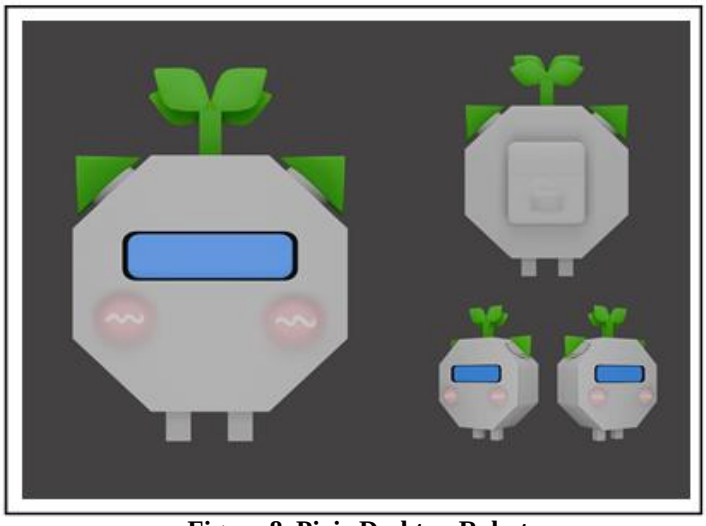

**Figure 8. Pixie Desktop Robot**

The figure shows the robot Pixie. Pixie measures 7" in length and 5" in height. The LCD serves as the its face and displays ongoing tasks and upcoming events inputted in the mobile system. Pixie is designed to give the user an

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adorable appearance. Its shape and overall look are inspired by the popular video game "Among Us."


**Figure 9. Checklist Dashboard**

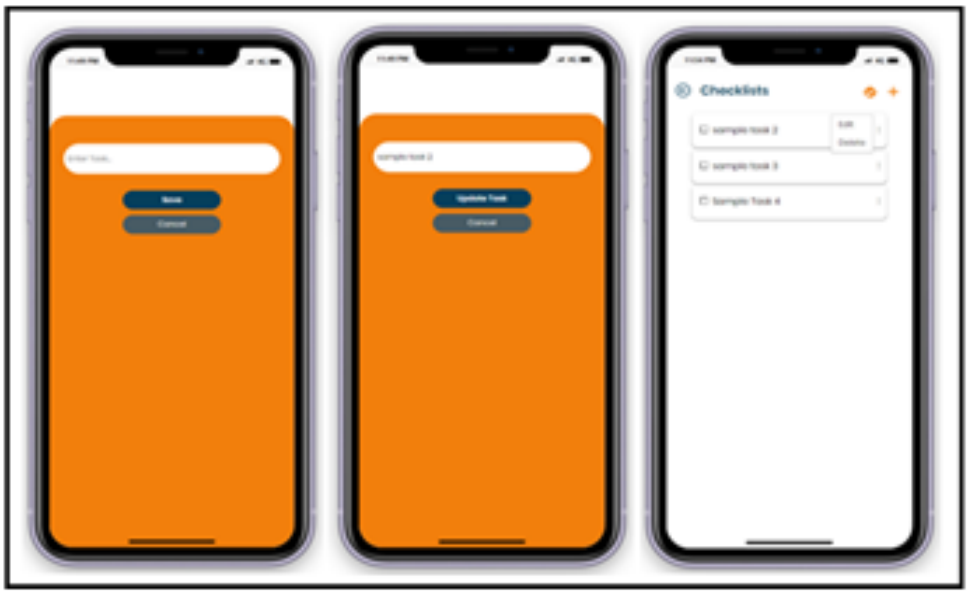


**Figure 10. Checklist Management (Adding, Editing, Options)**

Figures 9 and 10 show the system checklist feature. Additionally, it shows how inputted tasks are being managed. Users can Add, Edit and Delete Tasks. Users can also displays their tasks in Pixie by clicking the system's logo in the top right corner of the screen.

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**Figure 11. Reminder Dashboard**

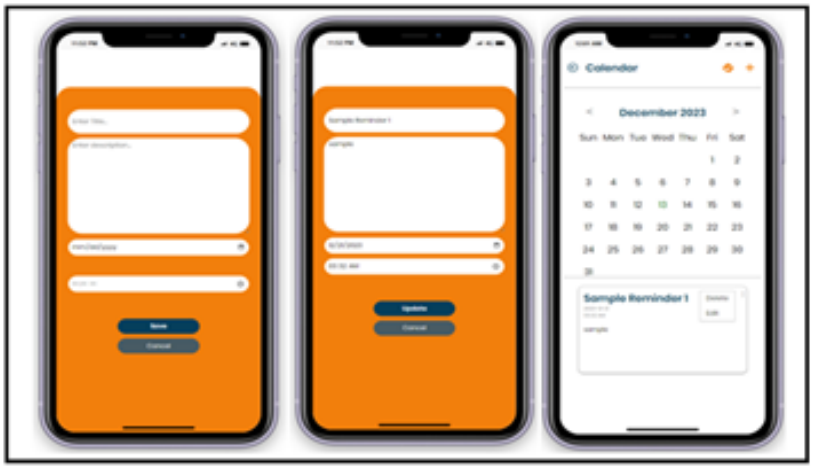

**Figure 12. Reminder Management (Adding, Editing, Options)**

Figures 11 and 12 shows the reminder feature of the system. It has a calendar to remind users of upcoming events. Additionally, it shows how inputted reminders are being managed. Users can Add, Edit and Delete Reminders. Users can also display their reminders in Pixie by clicking the system's logo in the top right corner of the screen.

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**Figure 13. Note Dashboard**


**Figure 14. Note Management (Adding, Editing, Options)**

Figure 13 and 14 shows the note feature of the system. It shows how inputted notes are being managed. Users can Add, Edit, and Delete Notes.


**Figure 15. Tic Tac Toe**

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Figure 15 shows the game Tic Tac Toe. A game where players interact by choosing an area to put their designated symbol. The first one to form a vertical line of their symbol wins. Users will play the game with Pixie.

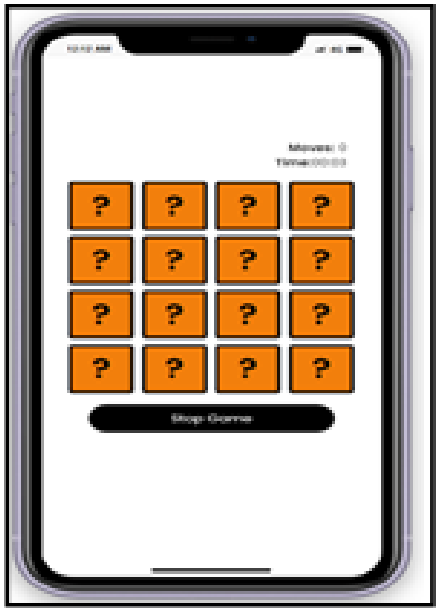

**Figure 16. Memory Game**

Figure 16 shows the game Memory Game. A game of card-flipping. Players must memorize what symbol is behind the cards and be able to find a match.

**Objective 2: Evaluate the Acceptance Level and Efficacy of the Desktop Task Management and Productivity App with Desktop Robot Display by the CCS Students.**

**Table1**. Respondents' Demographic Data

| **Course** | **Frequency** | **Percent** |
|---|---|---|
| IT | 41 | 82.0 |
| CS | 8 | 16.0 |
| UNSPECIFIED | 1 | |
| **Total** | 50 | 100.0 |

| **Year Level** | **Frequency** | **Percent** |
|---|---|---|
| First Years | 22 | 16.0 |
| Second Years | 8 | 20.0 |
| Third Years | 10 | 20.0 |
| Fourth Years | 10 | 20.0 |
| **Total** | 50 | 100.0 |

| **Sex** | **Frequency** | **Percent** |
|---|---|---|
| Male | 42 | 84.0 |
| Female | 6 | 12.0 |
| UNSPECIFIED | 2 | 4.0 |
| **Total** | 50 | 100.00 |

| **Age** | **Frequency** | **Percent** |
|---|---|---|
| 18 | 7 | 14.0 |
| 19 | 12 | 24.0 |

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| | | |
|---|---|---|
| 20 | 8 | 16.0 |
| 21 | 3 | 6.0 |
| 22 | 4 | 8.0 |
| 23 | 6 | 12.0 |
| 24 | 2 | 4.0 |
| 25 | 0 | 0.0 |
| 26 | 1 | 2.0 |
| 27 | 2 | 4.0 |
| UNSPECIFIED | 5 | 10.0 |
| **Total** | 50 | 100.00 |

The demographic data of the polled students, including their course, year level, sex and age, is displayed in the table above. By doing this, the researchers will be able to determine the student references on applications depending on these variables.

**Table 2:** Data for Task Management and Productivity App with Desktop Robot Display using TAM Theory.
Perceive Ease of Use

| **Item** | **Frequency** | **Interpretation** |
|---|---|---|
| I feel that using Pixie would be easy for me . | 3.9166667 | Agree |
| I feel that using Pixie would be clear and understandable | 3.8333333 | Agree |
| Learning to operate Pixie would be easy to me. | 4 | Agree |
| It would be easy for me to become productive using Pixie. | 3.8333333 | Agree |
| I feel that using Pixie would improve my overall performance. | 4.0833333 | Agree |
| **Over-all Mean:** | **3.9333333** | **Agree** |

Legend:

| **Scale** | **Interval** | **Description** | **Interpretation** |
|---|---|---|---|
| 5 | 4.20-5.00 | Highly Positive | Strongly Agree |
| 4 | 3.40-4.19 | Positive | Agree |
| 3 | 2.60-3.39 | Neutral | Neutral |
| 2 | 1.80-2.59 | Negative | Disagree |
| 1 | 1.00-1.79 | Highly Negative | Strongly Disagree |

**Perceived Ease of Use**

The table represents the Perceive Ease of Use Acceptance Level of Students. The “Mean” column in this table shows the average score provided by respondents, showing how simple they thought Pixie was to use. The data indicates that most respondents agree that utilizing Pixie would be simple and understandable and increase their overall performance. The “Verbal Description” column offers a verbal interpretation of the mean scores, ranging from “Strongly Disagree” to “Strongly Agree”.

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Perceived Usefulness

| Item | Frequency | Interpretation |
|---|---|---|
| Using Pixie improved my productivity. | 4.1666667 | Agree |
| Using Pixie would enable me to accomplish tasks more quickly. | 3.9166667 | Agree |
| I would find Pixie useful in completing my tasks. | 3.9166667 | Agree |
| Using Pixie would enhance my effectiveness. | 4 | Agree |
| Using Pixie would make it easier to complete my task. | 3.9166667 | Agree |
| **Over-all Mean:** | **3.9833333** | **Agree** |

Legend:

| Scale | Interval | Description | Interpretation |
|---|---|---|---|
| 5 | 4.20-5.00 | Highly Positive | Strongly Agree |
| 4 | 3.40-4.19 | Positive | Agree |
| 3 | 2.60-3.39 | Neutral | Neutral |
| 2 | 1.80-2.59 | Negative | Disagree |
| 1 | 1.00-1.79 | Highly Negative | Strongly Disagree |

**Perceived Usefulness**

The table shows that respondents generally agree that Pixie would boost their productivity, showing that they see it as a valuable tool for increasing efficiency. This impression is strengthened by the assumption that Pixie will help people accomplish tasks quickly and they see it as speedy job completion.

Behavioral Intention to Use

| Item | Frequency | Interpretation |
|---|---|---|
| I expect that I would use Pixie in the future routinely. | 4.3333333 | Agree |
| I think that using Pixie is beneficial for me. | 3.9166667 | Agree |
| I intend to use Pixie in the future. | 3.6666667 | Agree |
| I would Continue to see myself using Pixie for handling tasks issues. | 4 | Agree |
| I think using Pixie makes completing tasks more interesting | 4 | Agree |
| **Over-all Mean:** | **3.9833333** | **Agree** |

Legend:

| Scale | Interval | Description | Interpretation |
|---|---|---|---|
| 5 | 4.20-5.00 | Highly Positive | Strongly Agree |
| 4 | 3.40-4.19 | Positive | Agree |
| 3 | 2.60-3.39 | Neutral | Neutral |
| 2 | 1.80-2.59 | Negative | Disagree |
| 1 | 1.00-1.79 | Highly Negative | Strongly Disagree |

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**Behavioral Intention to Use**
The table represents the respondents agreeing that they see Pixie as beneficial for their needs. This perspective is reflected in their intention to continue using Pixie for their tasks, work and any related issues that could make Pixie used.

Attitude toward Using

| **Item** | **Frequency** | **Interpretation** |
|---|---|---|
| I like doing my tasks using Pixie. | 4.0833333 | Agree |
| I have positive feelings toward using Pixie | 4.0833333 | Agree |
| I look forward to those aspects of my tasks that requires me to use Pixie. | 3.8333333 | Agree |
| I think that using Pixie is a good idea. | 4.1666667 | Agree |
| I intend to use Pixie frequently | 3.9166667 | Agree |
| **Over-all Mean:** | **4.0166667** | **Agree** |

Legend:

| Scale | Interval | Description | Interpretation |
|---|---|---|---|
| 5 | 4.20-5.00 | Highly Positive | Strongly Agree |
| 4 | 3.40-4.19 | Positive | Agree |
| 3 | 2.60-3.39 | Neutral | Neutral |
| 2 | 1.80-2.59 | Negative | Disagree |
| 1 | 1.00-1.79 | Highly Negative | Strongly Disagree |

**Attitude Toward Using**
The table shows that respondent express point of view towards using Pixie as they enjoy performing and using Pixie's utilization. It indicates a positive attitude toward the Productivity Tool, meaning respondents find it enjoyable and pleasing for their tasks and activities.

Actual System Usage

| **Item** | **Frequency** | **Interpretation** |
|---|---|---|
| I recommend it to others. | 4.25 | Strongly Agree |
| Using Pixie is a way to complete tasks efficiently. | 4.25 | Strongly Agree |
| I know the best way to use Pixie. | 4.0833333 | Agree |
| I know how to use Pixie to improve my productivity | 4.1666667 | Agree |
| I use pixie for a various purpose (clinical, notes, info, etc.) | 4.25 | Strongly Agree |
| **Over-all Mean:** | **4.2** | **Strongly Agree** |

Legend:

| **Scale** | **Interval** | **Description** | **Interpretation** |
|---|---|---|---|
| 5 | 4.20-5.500 | Highly Positive | Strongly Agree |
| 4 | 3.40-4.19 | Positive | Agree |
| 3 | 2.60-3.39 | Neutral | Neutral |
| 2 | 1.80-2.59 | Negative | Disagree |
| 1 | 1.00-1.79 | Highly Negative | Strongly Disagree |

**Actual System Usage**
The table shows that respondents believing that utilizing Pixie is a practical approach to finishing activities, emphasizing its importance in increasing productivity. It concludes that respondents consider Pixie an effective tool for user's tasks-related issues

## V. CONCLUSION

The majority of respondents approved of the Task Management and Productivity App with Desktop Robot Display after the examination, according to the study's conclusion. It shows how respondents' perceptions of the usefulness and simplicity of these systems improve when it comes to using productivity and task management app with desktop robot display. It is possible that the task management and productivity app with desktop robot display has a positive impact on students' evaluations of its utility and simplicity based on the fact that their attitude improved while they used it.

**Ethical Approval**
The office of Research and the Dean of Computer Studies gave the researchers their permission in December 2024. They were also given permission to poll students from the College of Computer Studies by the president of St. Peter's College, Iligan City. With their consent, each study participant acknowledge that their information will be shared while maintaining data privacy.

**Data Availability**
**Underlying data**
Figshare: Task Management and Productivity App with Desktop Robot Display
https://doi.org/10.6084/m9.figshare.24130041
This project contains the raw data for evaluating the Task Management and Productivity App with Desktop Robot Display by the students
-Raw-data.xls

**Extended data**
Figshare: Task Management and Productivity App with Desktop Robot Display
https://doi.org/10.6084/m9.figshare.24130041

The project contains extended data.
- Quesionnaire.docx

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