POLYTECHNIC UNIVERSITY OF THE PHILIPPINES

**TASKTALK:**

**ONLINE GROUP COLLABORATION TOOL**

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**CHAPTER I – INTRODUCTION**

**PROJECT CONTEXT**

The current pandemic has truly affected the world we live in. People are forced to change their lifestyle and use online amenities to survive, and not get the COVID-19 virus. Truly, this world crisis closes many options for all, especially for those who are in school. This has resulted to the government leaning towards flexible learning where students would engage in online classes or correspondence. Since everything is now online, the researchers wished to produce a system that would help both the students and professors.

TaskTalk is a website that help students remain in touch with their peers to retain a classroom like atmosphere design a communication tool for synchronous and asynchronous conversation. To exchange files with simplicity and orderly for students to quickly plan and administer the class while also tracking its projects. The admin of the group offers roles to members using the function called task management and offer students with a platform on which they may offer updates on their assigned activities as well as assist them in having an effective workflow to complete assignments on time. We are doing this Project to give student a proper communication between team members and maintain a close connection n outside of physical workplace and interact with teams from different locations that can Provide Transparency to team members about tasks and the overall project progress and have an accountability to task members in doing project tasks and to Organize and properly manage projects using only one app.

**TECHNICAL BACKGROUND**

**Conceptual Framework**

Class Code  
Name  
Email  
Project Name  
Project Duration  
Project Members  
Project Tasks

**INPUT**

Assign Task  
Update task status  
(Finish, On-going, Gathering Resources)

Communicate  
Track Project Progress

**PROCESS**

Professors Assessment of the Finished Project

**OUTPUT**

Project Grade

Figure 1: Conceptual Framework (IPO)

This framework shows the input, process, and output of the system. User Information will be needed to create a profile or an account on the TaskTalk Website. They would have to choose whether they are a professor or a teacher to properly identify what profiles are appropriate for them. The professors account would have the access to create a class code, class projects, invite students to participate on those projects, and track the project progress. Once everyone has their respective accounts, they can now actively participate on their assigned tasks. If a students’ account is assigned as the leader, they can assign the respective tasks to its members and track the project’s progress. When the project has already

reached 100% and it is finished, they can now submit it to the respective professor which the professor would grade once it is thoroughly assessed.

**Theoretical Framework**

Nowadays, online collaboration tool is essential for both the students and professors wherein, the world is experiencing COVID-19 pandemic. Research has shown that students who collaborate increase their skills in problem solving, creativity, and interpersonal relationships. If productivity tools and their associated data become cloud-based, these provide the opportunity for collaboration that cannot be realized using desktop application.

Based on Online Collaborative Learning Theory created by Dr. Linda Harasim, there exist three phases of knowledge construction through discourse in a group:

**1. Idea Generating:** the brainstorming phase, where divergent thoughts are gathered. The system is a perfect tool for the communication of users which enable them to have a brainstorming of ideas.

**2. Idea Organizing:** the phase where ideas are compared, analyzed and categorized through discussion and argument.

**3. Intellectual convergence:** the phase where intellectual synthesis and consensus occurs, including agreeing to disagree, usually through an assignment, essay, or other joint peace of work.

**Significance of the Study**

This study/system will be undertaken to develop a collaboration tool with a purpose of being a platform to help the students and professors with their online amenities.

Benefiting the study are the various sectors as follows:

**The students**

The direct recipients of this system are the students. They will be benefitted for the creation of this website becausedue to Covid-19, group communication through different online platforms is hard. Some students even create a lot of group conversations for different group activities which can become excessive because most of the time, it is hard to find these conversations in the messages. So even if you are living in the provinces, group projects can be handled efficiently using our website.

**The professors**

The system will be beneficial to the professors, in general, especially those who are struggling on online classroom set-up. Through this system, they can track who is doing what and how far along are the students regarding with their project. This could be a basis for giving the students fair grades on their group performance.

**The future researchers**

The ideas presented in this system may be used as reference data in conducting new research or in testing the validity of other related findings. This study will also serve as their cross-reference that will give them an overview about task-management system.

**Policies and Procedures**

**Policies (discusses the related policies applied on the study)**

**1. Data Collection**

We collect technical data, customer data, content, and other data received from you, your organization, or other third-party sources.

**2. Data Uses**

We use Personal Data to provide, improve and secure our Service; for analytics, marketing, and sales purposes; to comply with applicable laws; and to support our legitimate interests.

**3. Data Sharing**

We share your data (& feedback) with our Service Providers; our customers; within our group; in accordance with legal compliance and amongst Users on your shared boards.

**4. Data Security**

We secure your Personal Data using industry-standard physical, procedural, and technical measures.

**5. Data Subject Rights**

Individuals have rights concerning their Personal Data. You may exercise your rights by contacting us or your Account Admin.

**6. Additional Notices**

We may update this policy from time to time; we are not responsible for other websites or services’ privacy practices; we have appointed a Data Protection Officer and have designated a Representative in the EU. Do not hesitate to contact our DPO with any questions regarding privacy and Data Protection!

*Retrieved from Privacy Policy – Monday.com Legal Portal*

**Procedures**

Diagram

Description automatically generated**Context Diagram**

*Fig. 3 Context Diagram*

**DFD**

Manage Project

1.0

Project Configuration

Project Configuration Details

Project

Project Details

Project Leader

Assign Task

2.0

Do Assigned Task

3.0

Track Progress/ Review Task Done

4.0

Finalize and Submit Project

5.0

Department

Members

Final Project

Task Done

Reviewed Project

Finalized Project

Designated Project

*Fig. 4 DFD*

**Data and Process**

|  |  |
| --- | --- |
| **Project Leader**  **(Student)** | **Task Talk  (Data Storage)** |
| Start  Configure Project | Manage Project  Give Project Details  End |

Table 1: Manage Projects

|  |  |
| --- | --- |
| **Project Leader**  **(Student)** | **Members**  **(Students)** |
| Start  Adding  members  and Assigning  Task | Receive tasks given  Received tasks given  End |

Table 2: Assign Task

|  |  |
| --- | --- |
| **Students** | **Task Talk**  **(Data Storage)** |
| Start  Do Assigned  Tasks | Receive Submitted Tasks  End  Received submitted tasks. |

Table 3: Do Assigned Task

|  |  |
| --- | --- |
| **Task Talk**  **(Data Storage)** | **Professor** |
| Start  Submitted Tasks | Receive Submitted Tasks  Track Progress /  Review Task Done  End |

Table 4: Track Progress/Review Task Done.

|  |  |  |
| --- | --- | --- |
| **Student** | **Task Talk**  **(Data Storage)** | **Professor** |
| Start  Submit  Finalized Project | Submitted Final Project | End  Grade Final Project  Receive Submitted Final Project |

Table 5: Finalize and Submit Project

**PROBLEM ANALYSIS**

**Fishbone Diagram**

**SCHOOL**

-Different kinds

of platforms

-Dealing with

students’

performances

**SUBMISSION**

-Failure on

submission

-Extended

Deadlines

**STUDENTS**

-Computer Illiteracy

-Confusing

task

assignments

**COMMUNICATION**

-Miscommu

-nication

**ORDER**

-Unorganized

and

Spontaneous

tasks

**PROCESS**

- requires a lot

of paper works

**Slow progress**

**of tasks**

**resulting to extended deadlines (if applicable) or failure to submit that will result**

**into low grade assessment.**

*Fig. 6 Fishbone Diagram*

**Problem and Solution Statements**

|  |  |
| --- | --- |
| **Problem** | **Solution** |
| Computer Illiteracy | Provide a step-by-step tutorial for new accounts |
| Confusing task assignments | Assignment of tasks in persons could be easily unacknowledged since it is only spoken by word giving the tendency for the students to forget what was assigned to them. Our proposed website gives you the option to assign tasks to members which the member would easily fulfil. |
| Failure on submission | Failure to submit projects will give daily notifications to submit it. |
| Extended deadlines | Failure to submit on the said deadline automatically deducts points on grade assessments |
| Miscommunication | The website will provide a chat room where students of the same group can properly communicate about the projects. They can also share their insights and links on that topic. |

|  |  |
| --- | --- |
| Different kinds of platform | This website would help the users to use an ‘All-in-one’ website for online group collaborations and online project submissions |
| Dealing with students’ performances | The website will give access for the professors to track what the students are doing and who is doing what. |
| Requires a lot of paper works | Submitted projects would be online meaning no papers are needed. |
| Unorganized and Spontaneous tasks | Students who participate in projects usually are unorganized, they cannot track everything, some cannot even handle their groupmates. The website will give you a way to properly plan your project and organize it step-by-step to be able to submit it on time. |

***Table 1 Problem-Solution Statements***

**Problem-Requirements Matrix**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Database  Module | Report Module | Analysis Module | Help Module | Authentica-tion Module |
| Computer Illiteracy |  | **√** |  | **√** | **√** |
| Confusing task assignments |  |  | **√** |  |  |
| Failure on submission |  | **√** | **√** | **√** |  |
| Extended deadlines |  | **√** |  | **√** |  |
| Miscommunication |  | **√** | **√** |  |  |
| Different kinds of platform |  | **√** | **√** |  | **√** |
| Dealing with students’ performances |  |  | **√** |  |  |
| Requires a lot of paper works | **√** |  |  |  |  |
| Unorganized and Spontaneous tasks |  | **√** | **√** |  |  |

***Table 2 Problem-Requirements Matrix***

**PURPOSE AND DESCRIPTION**

TaskTalk aims to have efficient communication between students and professors to properly organize the given tasks effortlessly online. It is a website that could help you in properly planning and managing your existing projects online and within an easy reach.

The system requires specific data from the users that needed to be filled when they wished to use the website. This data will enable the department to track their students’ performances and tasks. Also, it shows the claims/ownership of the projects.

As for the professors, TaskTalk aims to make their job easier especially in times like this. The system only requires them to have an efficient and flexible communication with the students regarding their projects. Thus, with this system, they can track what their students are doing and how does the projects progress.

**SPECIFIC OBJECTIVES**

1. To enable students keep in touch with their classmates, to keep a classroom like environment.

2. To develop a communication tool for synchronous and asynchronous communication. To share files with ease and orderly.

3. For students to easily organize and manage the class while also tracking its projects. The admin of the group gives roles to people by the feature called task management.

4. To give students a platform wherein they can provide updates with their given tasks.

5. To help people have an efficient workflow to deliver projects on time.

6. Create a proper project plan to complete it on time.

7. Proper communication between team members and maintain a close connection n outside of physical workplace.

8. Interact with teams from different locations.

9. Provide Transparency to team members about tasks and the overall project progress.

10. Teach accountability to task members in doing project tasks.

11. Organize and properly manage projects using only one app.

12. Create, assign, and manage tasks.

**SCOPE AND LIMITATION**

This study aims to help students and professor who engage on online collaborations to make the said process run smoothly and efficiently using the TaskTalk website. This study will only be exclusive on San Juan City, Philippines, specifically for the Polytechnic University of the Philippines. It will take place in the year 2021. The research does not seek to go above or below the study and will only discuss information that are accurately involved in the said topic.

The system is capable of inputting 10 names in the group and assign 1 of them as the leader. Each of them will be receiving an individual task that they can send through the project thread and will be marked as "Done" and all the group can see the status of the groupmate as well as the project progress.

The developer would use the language PHP using the Visual Studio Code version 1.57 IDE in coding the system and Xampp to run the phpMyAdmin (MariaDB). The website is going to be accessible only

to the students and teachers of PUP San Juan. The website's limitations is that it will provide security to all of the files being exchanged and privacy for the welfare of the users. The website can be used in Windows such as Windows 7 and above, Mac, IOS Devices and Android Devices. It will also work in different browsers such as Google Chrome, Safari, and the like.

One limitation of this app is the number of tasks is to be sent to the group. The task is only distributed one to three (1-3) per groupmate.