PARSHVANATH CHARITABLE TRUST'S

A.P. Shah Institute of Technology

Thane, 400615

Academic Year: 2023 - 2024

Department of Computer Engineering

CSL605 SKILL BASED LAB COURSE: CLOUD COMPUTING

Mini Project Report

- **Title of Project** : To Do App
- **Year and Semester** : T.E. (Sem VI)
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PROBLEM DEFINITION:

Normal task managers suffer from limitations such as limited integration, complex interfaces, minimal customization, basic collaboration features, inadequate reminders, poor time management tools, platform restrictions, security vulnerabilities, and cost/accessibility issues. These are the problem of normal task manager:

Limited Integration: Normal task managers often lack seamless integration with other tools and platforms, making it difficult to centralize all tasks and information in one place.

Complexity: Some task managers may have overly complex interfaces or features, which can be overwhelming and difficult to navigate for users seeking simplicity and ease of use.

Lack of Customization: Many task managers offer limited customization options, such as the ability to organize tasks based on priority, due dates, or categories, which may not fully accommodate individual preferences and workflows.

Limited Collaboration Features: Basic task managers may lack robust collaboration features, such as task sharing, commenting, or real-time updates, making teamwork and project management more challenging.

Ineffective Reminder System: The reminder system in normal task managers may be limited in functionality, leading to missed deadlines and overlooked tasks if users do not receive timely notifications.

Difficulty in Time Management: Task managers may not provide adequate tools for time tracking or scheduling, making it challenging for users to manage their time effectively and allocate resources efficiently.

Platform Dependence: Some task managers may be limited to specific platforms or operating systems, restricting access for users who prefer to manage tasks across multiple devices or platforms.

Security Concerns: Task managers may not prioritize data security and privacy, potentially exposing sensitive task information to security threats or unauthorized access.

Cost and Accessibility: High costs or subscription fees associated with some task managers may limit accessibility for users with budget constraints or those seeking free alternatives.

INTRODUCTION:

In today's fast-paced world, where multitasking and juggling numerous commitments are the norm, Todo app have become essential companions for enhancing productivity and efficiency. From managing work projects and household chores to tracking academic assignments and personal goals, Todo app offer a comprehensive solution for staying organized and focused. By providing a clear roadmap of tasks and priorities, Todo app empower users to make informed decisions about how to allocate their time and resources, ultimately leading to greater success and fulfilment in both their personal and professional lives.

Todo app are indispensable tools for organizing tasks, managing time, and prioritizing responsibilities effectively. Whether handwritten notes or digital applications, these lists provide a structured framework for individuals and teams to plan, track, and accomplish their goals. By breaking down larger tasks into smaller, manageable steps and setting deadlines, Todo app help users stay focused and on track towards achieving personal and professional objectives. They serve as visual aids, ensuring that no task is overlooked or forgotten amidst the daily hustle, and enable users to allocate resources efficiently.

Key Features of Todo app Application:

Task Management: Efficiently create, organize, and prioritize tasks based on importance and deadlines.

Reminders and Notifications: Customize reminders to stay updated on upcoming deadlines and overdue tasks.

Collaboration: Foster teamwork with features like task sharing and assignment to streamline project management.

Sync Across Devices: Seamlessly access and update tasks from multiple devices for convenience and productivity.

Customization and Integration: Tailor task attributes and integrate with other tools for personalized workflow management.

DESCRIPTION:

Cloud Services:

Todo app is hosted on Amazon Web Services (AWS) to leverage the scalability, reliability, and security of the cloud. The key AWS services utilized in this project include:

AWS Elastic Beanstalk: The application is deployed and hosted on AWS Elastic Beanstalk, a fully managed service that handles the deployment, scaling, and monitoring of the web application. Elastic Beanstalk simplifies the process of provisioning and managing the underlying infrastructure, allowing the development team to focus on building the application.

Amazon Relational Database Service (Amazon RDS): The application's database is hosted on Amazon RDS, a managed database service that supports various database engines, including MySQL. Amazon RDS handles database administration tasks, such as software patching, automatic backups, and failover, ensuring the reliability and availability of the application's data.

Amazon Virtual Private Cloud (Amazon VPC): The application and database components are deployed within a private Amazon VPC, which provides a secure and isolated network environment. This ensures that the application's data and resources are protected from external access, enhancing the overall security of the system.

Methodologies Used:

The most common methodologies used in Todo app include GTD (Getting Things Done), Kanban, Pomodoro Technique, Eisenhower Matrix, Agile methodologies, and SMART Goals. These methodologies help users organize tasks, prioritize work, manage time effectively, and achieve their goals efficiently.

GTD (Getting Things Done) and Kanban: The development team follows the GTD (Getting Things Done) and Kanban. GTD emphasizes capturing, clarifying, organizing, and reviewing tasks systematically to increase productivity. Kanban provides a visual approach to task management, where tasks are represented as cards on a board, allowing users to track progress through different stages of completion. These methodologies are widely adopted due to their effectiveness in helping users organize tasks, prioritize work, and manage projects efficiently.

Software Requirements:

The Todo app Application has the following software requirements:

Front-end Technologies:

- HTML5, CSS3, JavaScript and Python(Flask) for building the user interface

Back-end Technologies:

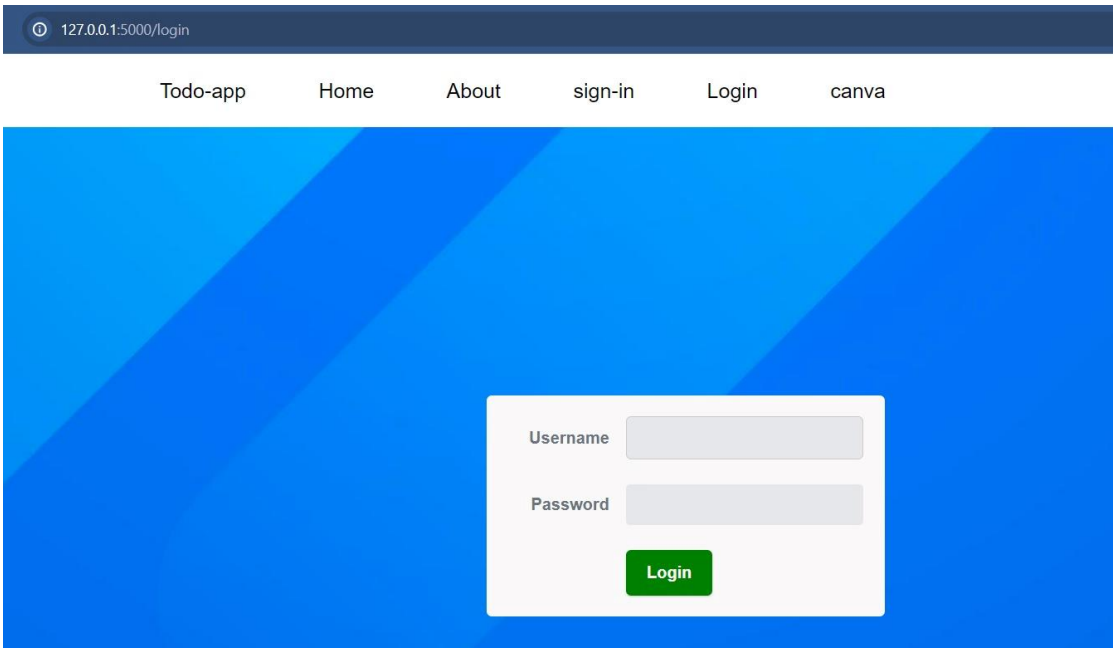
- MySQL WorkBench

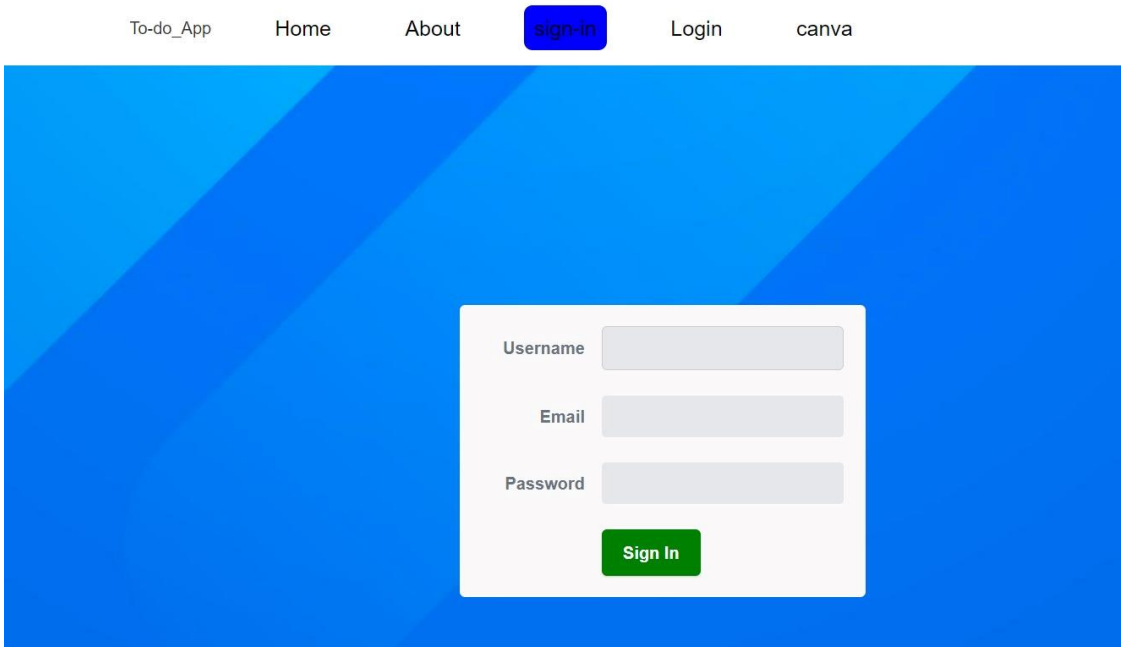
Database:

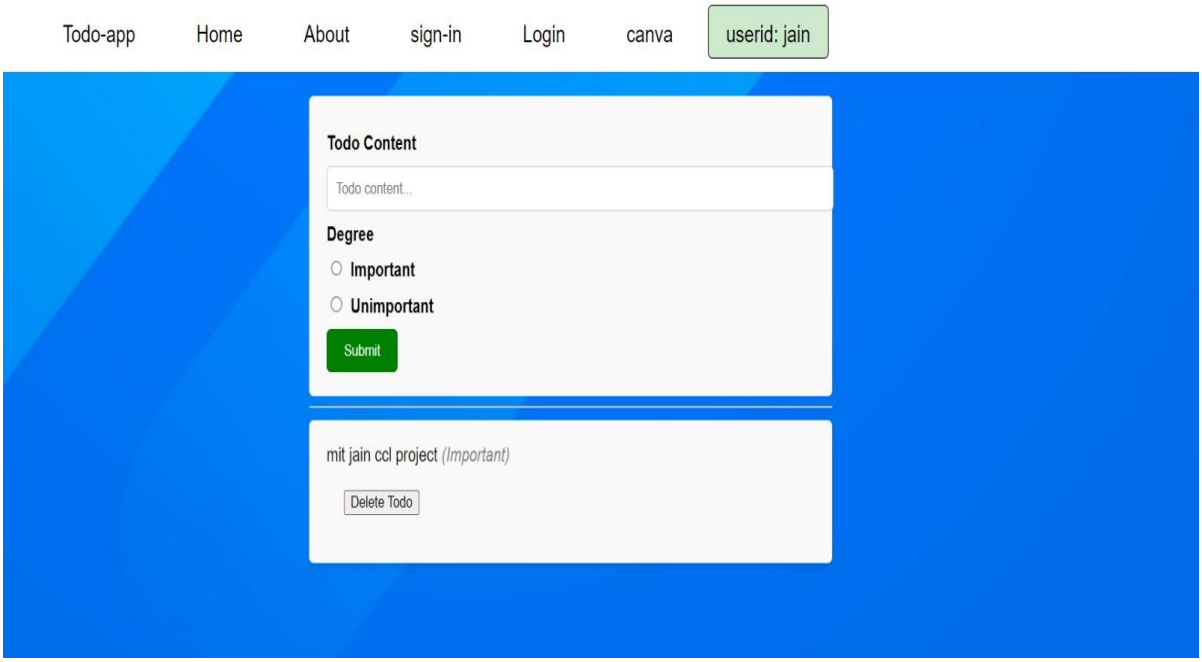
- MySQL as the relational database management system
- Integration with Amazon RDS for database hosting and management

Todo app leverages the power of AWS cloud services, such as Elastic Beanstalk, Amazon RDS, and Amazon VPC, to provide a comprehensive and scalable solution for hotels. By employing an Agile development approach and a robust set of software technologies, the application aims to streamline hotel operations, enhance the guest experience, and drive business growth.

IMPLEMENTATION:



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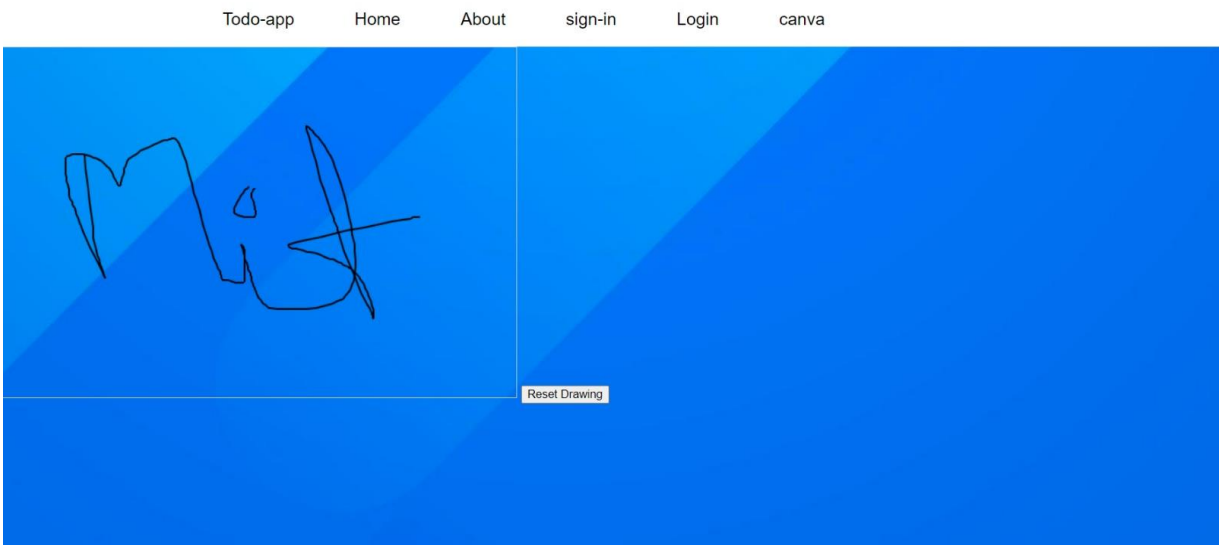
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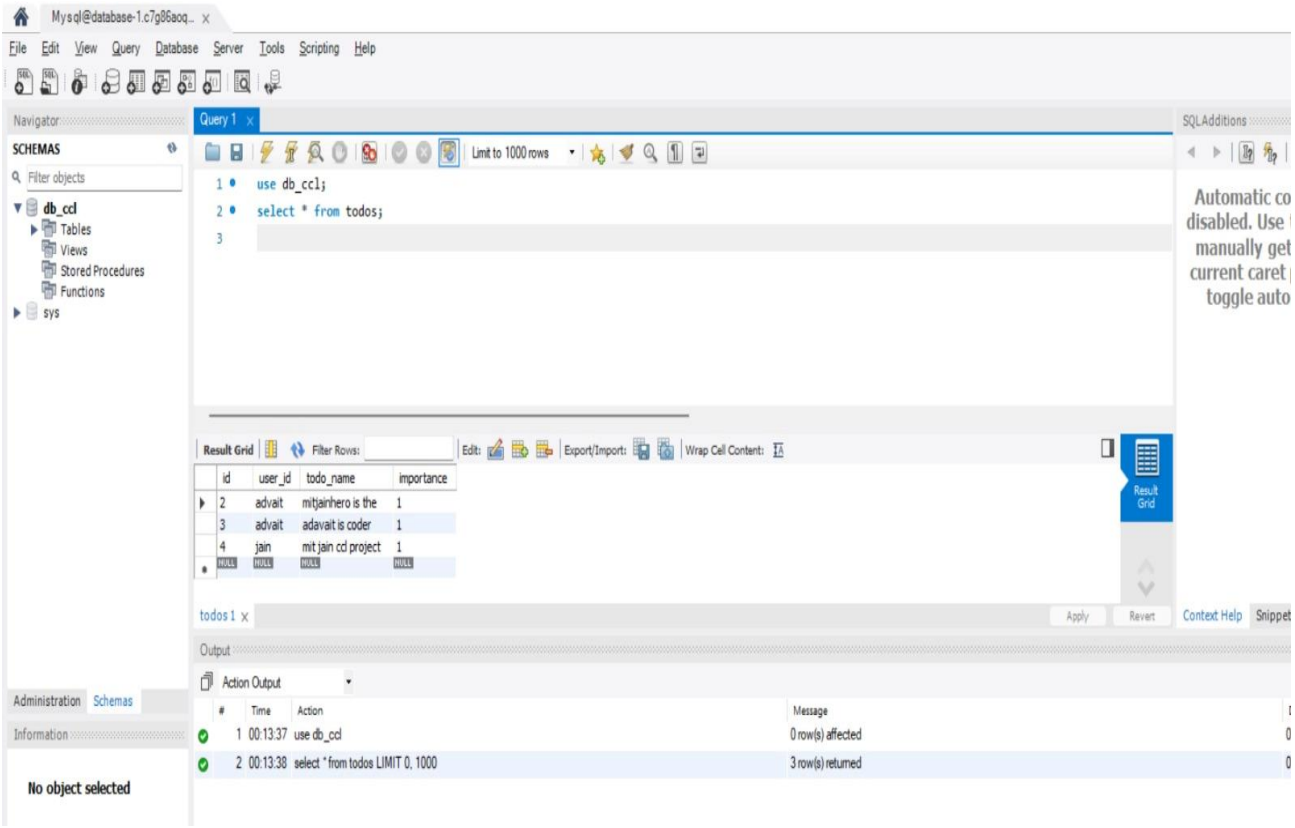
Mysql@database-1.c7g86aoq...
File Edit View Query Database Server Tools Scripting Help
Navigator
SCHEMAS
Filter objects
db_ccl
Tables
Views
Stored Procedures
Functions
sys
Query 1
Limit to 1000 rows
1 use db_ccl;
2 select * from todos;
3
SQLAdditions
Automatic co
disabled. Use
manually get
current caret
toggle auto
Result Grid
Filter Rows:
Edit:
Export/Import:
Wrap Cell Content:
id user_id todo_name importance
2 advait mitjainhero is the 1
3 advait adavait is coder 1
4 jain mit jain cd project 1
NULL NULL NULL NULL
Result Grid
todos 1
Apply
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Context Help
Snippet
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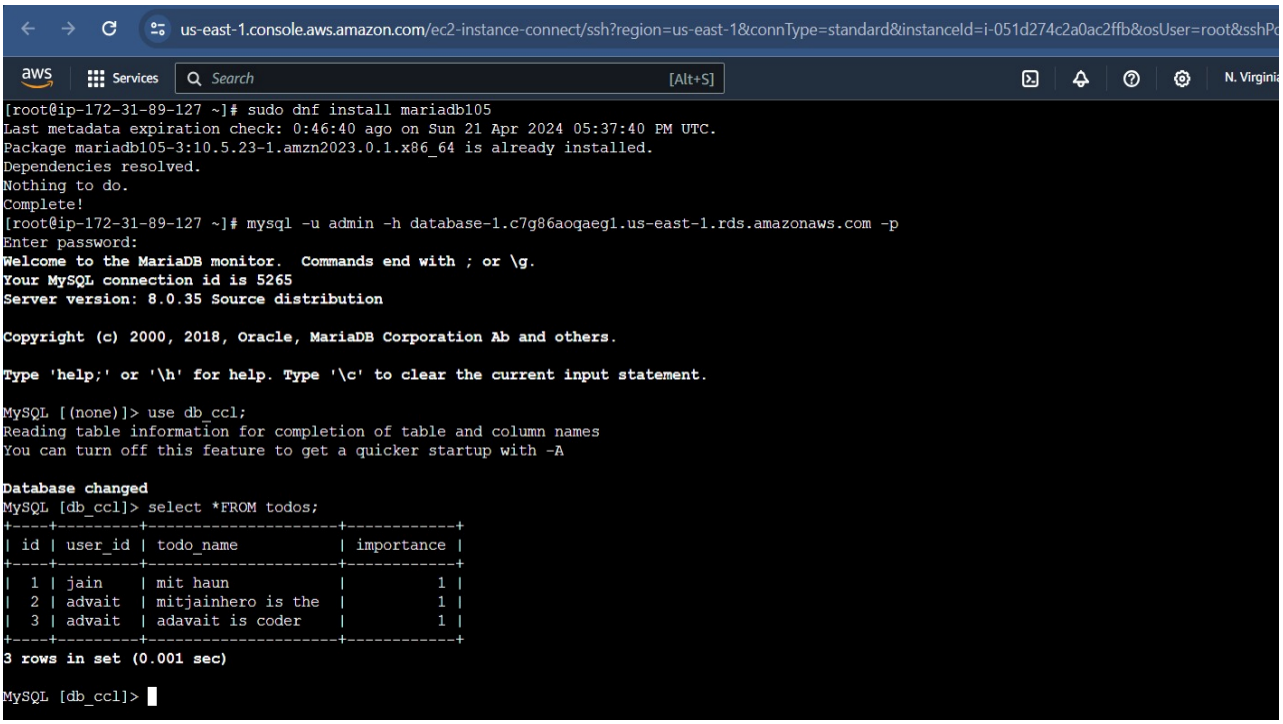
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Services
Search
[Alt+S]
N. Virginia
[root@ip-172-31-89-127 ~]# sudo dnf install mariadb105
Last metadata expiration check: 0:46:40 ago on Sun 21 Apr 2024 05:37:40 PM UTC.
Package mariadb105-3:10.5.23-1.amzn2023.0.1.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@ip-172-31-89-127 ~]# mysql -u admin -h database-1.c7g86aoqaeg1.us-east-1.rds.amazonaws.com -p
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MySQL connection id is 5265
Server version: 8.0.35 Source distribution
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
MySQL [(none)]> use db_ccl;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A
Database changed
MySQL [db_ccl]> select *FROM todos;
+----+---------+---------------------+------------+
| id | user_id | todo_name | importance |
+----+---------+---------------------+------------+
1	jain	mit haun	1
2	advait	mitjainhero is the	1
3	advait	adavait is coder	1
+----+---------+---------------------+------------+
3 rows in set (0.001 sec)
MySQL [db_ccl]>

LEARNING OUTCOME:

After using the Todo app application, users will be able to:

Stay Organized: Users can efficiently manage their tasks and responsibilities, ensuring nothing falls through the cracks.

Prioritize Tasks: By categorizing and prioritizing tasks, users can focus on what's most important and allocate their time and resources effectively.

Meet Deadlines: Reminders and notifications help users stay on track with deadlines, reducing the likelihood of missing important dates or commitments.

Increase Productivity: With a clear roadmap of tasks and priorities, users can work more efficiently and accomplish more in less time.

Reduce Stress: The ability to track tasks and progress alleviates the mental burden of remembering everything, leading to reduced stress and anxiety.

Improve Time Management: By breaking down tasks into manageable steps and scheduling them appropriately, users can improve their time management skills and make better use of their time.

Enhance Collaboration: Collaboration features enable users to work effectively with team members, streamlining communication and coordination on shared tasks and projects.

Access Tasks Anywhere: Syncing across devices ensures that users have access to their tasks wherever they go, allowing for seamless task management on the go.

Adapt to Changes: Users can easily update and adjust their tasks and priorities as needed, adapting to changing circumstances and priorities.

Achieve Goals: By consistently managing tasks and staying focused on priorities, users can make progress towards their goals and objectives, leading to a sense of accomplishment and fulfilment.

By achieving these learning outcomes, users will be able to increase efficiency, improve time management, reduce stress, enhance focus, boost productivity, meet goals, improve communication, maintain work-life balance, build confidence, and ultimately drive success.