

### 3. Project Definition

#### Overview

In the domain of **task management** and productivity, users often turn to **task management** applications to streamline their workflow and enhance efficiency. Individuals, teams and organizations use these tools to organize tasks, set priorities and collaborate effectively. Understanding the importance of users having insights into their task history, upcoming tasks, and overall productivity, the proposed app aims towards a **transparent and insightful overview**. By offering a comprehensive view of tasks, the system empowers users to make informed decisions, prioritize tasks effectively and optimize their workflow for increased productivity.

-Describe a brief explication of what kind of insights the app provides or what makes the overview transparent.

-Try to avoid using the same words in the same line.

#### Integration with APIs

-You can delve into what functions of these APIs they seek to implement within the system

Since the team knowledge is not advanced, the integration with **Asana, Slack and GPT-Chat APIs** will be the final task, the main focus will be the creation of a functional task management system, automated reminders, notifications and daily messages as well as many other features that don't involve API integration, with that being said, after the creation of the system we'll focus all our efforts on the integrations that we talked about.

### 4. IEEE 830

#### 1 INTRODUCTION

##### 1. Introduction

This Software Requirements Specification for the development of a Java-based application has been prepared with Asana in mind. Its structure is made based on the standard IEEE *Recommended Practice for Software Requirements Specifications*. You should give an introduction to your project, not to the type of document.

The purpose of the Software Requirements Specification (SRS) document is to provide detailed and comprehensive guidance for the development, implementation and understanding of Java-based work management application. This document clearly establishes the objectives, functions, and functional and nonfunctional objectives, functions and requirements of the software.

This document is intended for a diverse audience.

2.1 Product Perspective Specify the type of external applications and their use within the system

This application stands out for its flexibility when integrating with external communication platforms, allowing daily messaging functions.

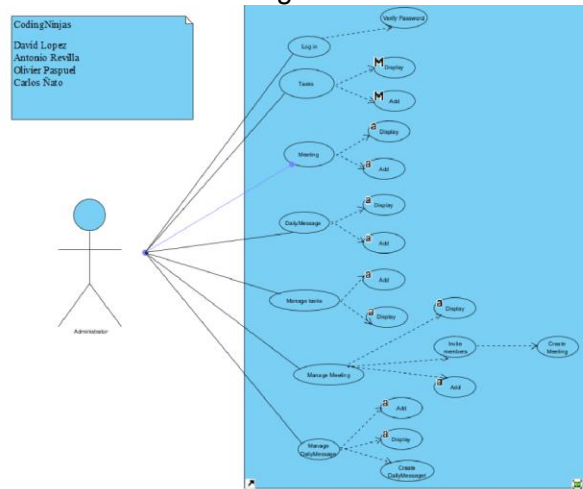
Future Organizational Mode:

Explain it deeply

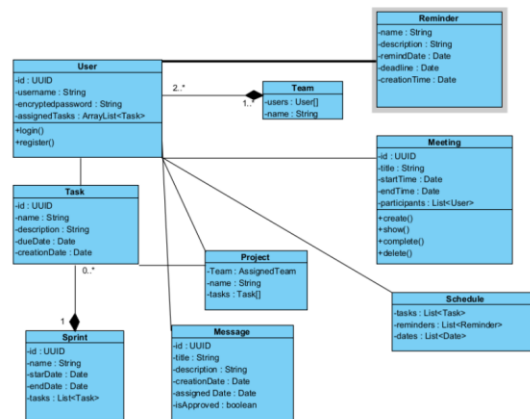
- Planning for a future update includes an **organizational mode**.

## 5. UML

### a. Use Case Diagram



### b. Class Diagram



## 6. Test Cases

## TEST CASES

### CASES MENÚ

1. Create a new account
  - Input: The options Register as an administrator and Register as a developer are displayed to select
  - Expected: You can select any of the two options to register
2. Register as an administrator
  - Input: A username and password are registered, additionally the name of the organization to which the administrator belongs is registered.
  - Expected: A new user is created correctly and the option to start the session in the program is displayed.
3. Register as administrator with existing data
  - Input: A username and password are registered, which already exist
  - Expected: A notice is generated indicating that the data entered is not valid
4. Register as an developer
  - Input: The organization code is requested, and the corresponding username and password are requested.
  - Expected: A new developer is created successfully and you can log in with those credentials
5. Register as a developer with existing data
  - Input: The organization code is requested, and an existing username is entered.
  - Expected: You receive a notice that you cannot register a new account with those credentials

### 7. Code Quality

```
public static String extractContentFromResponse(String response) {  
    int startMarker = response.indexOf(str:"content") + 11; // Marker for where the content starts.  
    int endMarker = response.indexOf(str:"\"", startMarker); // Marker for where the content ends.  
    return response.substring(startMarker, endMarker); // Returns the substring containing only the response.  
}
```

```

J MenuUtils.java 1 J PasswordHandler.java 1 X public static Product addProduct(ArrayLi Untitled-1
C:\> Users > WILLIAM > AppData > Local > Temp > Temp1_utils-20231220T025648Z-001.zip > utils > J PasswordHandler.java > PasswordHandler > decryptPassword(S
27     }
28
29     // public static String encryptPassword(String password) {
30     //     try {
31     //         SecureRandom random = new SecureRandom();
32     //         byte[] salt = new byte[SALT_LENGTH];
33     //         random.nextBytes(salt);
34     //
35     //         byte[] passwordWithSalt = new byte[password.length() + salt.length];
36     //         System.arraycopy(password.getBytes(), 0, passwordWithSalt, 0, password.length());
37     //         System.arraycopy(salt, 0, passwordWithSalt, password.length(), salt.length);
38     //
39     //         MessageDigest md = MessageDigest.getInstance("SHA-256");
40     //         byte[] hashedPassword = md.digest(passwordWithSalt);
41     //
42     //         StringBuilder hexPassword = new StringBuilder();
43     //         for (byte b : hashedPassword) {
44     //             hexPassword.append(String.format("%02x", b));
45     //         }
46     //
47     //         return new EncryptedPassword(hexPassword.toString(), bytesToHexString(salt));
48     //     } catch (NoSuchAlgorithmException e) {
49     //         e.printStackTrace();

```

```

public static boolean orgCodeExists(UUID orgCode) {
    ArrayList<Organization> orgs = Organization.getOrganizationsFromFile();
//     ArrayList<? extends User> users = userType.equals("dev") ? getAdminsFromFile() : getDevsFromFile();
    for (Organization org : orgs) {
        if (org.getOrganizationCode().equals(orgCode)) {
            return true;
        }
    }
    return false;
}

```

```

public class Project {
    private Team AssignedTeam;

```

## 8. Validation

```

Select your user type:
1. Developer
2. Administrator
3. Back to top
1
Login
Username:
Glacial4
Password:
Glacial
Login successful
Main Menu
Select one option:
1. Task
2. Meeting
3. Create daily message
4. Logout
2

```

## 9. Verification

Daily Dev				
Input	Description	Expected Result	Actual Result	Status
1	Start a loop in the log out	log out	Start a bucle	Failed
2	Incorrect username exits the program	request reentry	Program sale	Failed
3	Asks for the Id to create task, it exits	Allows you to enter the Id	Program sale	Failed
4	If you put show meeting and it is empty, it generates	message that is empty	Start a bucle	Failed
5	If you put show update and it is empty, it generates a	message that is empty	Start a bucle	Failed
6	When creating meeting it takes invalid dates	invalid dates message	dates are saved	Failed
7	When you create a daily message you exit the program	message that is empty	Start a bucle	Failed
8	There is no way to add a participant	Option to add a participant	no option to add	Failed
9	A letter is put on the menu	Allow reentry	Program sale	Failed
10	Register as a developer	What allows registration	Start a bucle	Failed

```

C:\WINDOWS\system32\cmd.exe
Select an option: 1

Complete Task:
Enter the ID of the task to complete:
4961667c-137c-4eaf-a938-ac7899d7c3bb
Task completed successfully!

Showing tasks...
Tasks created by the current user:
| ID | Name | Description | Due Date |
|----|-----|-----|-----|
| 5940480e-fefa-4ba2-99a5-3ab2c9adc0d1 | TestCase | TestCase 65623 | 2023-12-19 |
| 4961667c-137c-4eaf-a938-ac7899d7c3bb | Test Case | Task6888 | 2023-12-19 |

Options:
Select an option Menu
1. Complete Tasks
2. Back to Menu
Select an option: 1

Complete Task:
Enter the ID of the task to complete:
Glacial
Invalid UUID string: Glacial
C:\Users\Carles\Downloads\dist\dist\

```

```

Registration Menu
1. Register as an administrator
2. Register as a developer
3. Back to top

2
Enter your organization code (your administrator should give it to you):
56
Username:
Glacial
Password:
Glacial
Invalid UUID string: 56

```

```

Main Menu
1. Create a meeting
2. Show meetings
3. Update a meeting
4. Delete a meeting
5. Exit
Enter your choice: 2
Empty meetings.json created.
Showing meetings...
Exception in thread "main" java.lang.NullPointerException: Cannot invoke "java.util.List.isEmpty()" because "ec.edu.espe
.dailyDev.model.Meeting.meetingsList" is null
    at ec.edu.espe.dailyDev.model.Meeting.show(Meeting.java:255)
    at ec.edu.espe.dailyDev.view.LandingPage.meetingMenu(LandingPage.java:236)
    at ec.edu.espe.dailyDev.view.LandingPage.showMainMenu(LandingPage.java:187)
    at ec.edu.espe.dailyDev.view.LandingPage.showLogin(LandingPage.java:86)
    at ec.edu.espe.dailyDev.view.LandingPage.showLandingPage(LandingPage.java:43)
    at ec.edu.espe.dailyDev.view.DailyDevSystem.main(DailyDevSystem.java:11)

C:\Users\Carlos\Downloads\dist\dist>

```

```

C:\WINDOWS\system32\cmd. x + v
Main Menu
Select one option:
1. Task
2. Meeting
3. Create daily message
4. Logout
2
Main Menu
1. Create a meeting
2. Show meetings
3. Update a meeting
4. Delete a meeting
5. Exit
Enter your choice: 3
Updating a meeting...
Meeting List:
Exception in thread "main" java.lang.NullPointerException: Cannot invoke "java.util.List.iterator()" because "ec.edu.espe
.dailyDev.model.Meeting.meetingsList" is null
    at ec.edu.espe.dailyDev.model.Meeting.listMeetings(Meeting.java:384)
    at ec.edu.espe.dailyDev.model.Meeting.update(Meeting.java:328)
    at ec.edu.espe.dailyDev.view.LandingPage.meetingMenu(LandingPage.java:239)
    at ec.edu.espe.dailyDev.view.LandingPage.showMainMenu(LandingPage.java:187)
    at ec.edu.espe.dailyDev.view.LandingPage.showLogin(LandingPage.java:86)
    at ec.edu.espe.dailyDev.view.LandingPage.showLandingPage(LandingPage.java:43)
    at ec.edu.espe.dailyDev.view.DailyDevSystem.main(DailyDevSystem.java:11)

C:\Users\Carlos\Downloads\dist\dist>

```

```

Invalid date/time format or out of range. Please enter the date/time in the correct format.
29/02/2024 10:59
Enter end Time (format: DD/MM/YYYY HH:mm):
30/02/2024 10:80
Participants available:
Select a participant by index (1-0):
|

```

```

Invalid date/time format or out of range. Please enter the date/time in the correct format.
29/02/2024 10:59
Enter end Time (format: DD/MM/YYYY HH:mm):
30/02/2024 10:80
Participants available:
Select a participant by index (1-0):
|

```

```

Select your user type:
1. Developer
2. Administrator
3. Back to top
Glacial
Error displaying Landing Page: null

Main Menu

Select one option:
1. Task
2. Meeting
3. Create daily message
4. Logout
Exception in thread "main" java.util.InputMismatchException
    at java.base/java.util.Scanner.throwFor(Scanner.java:947)
    at java.base/java.util.Scanner.next(Scanner.java:1602)
    at java.base/java.util.Scanner.nextInt(Scanner.java:2267)
    at java.base/java.util.Scanner.nextInt(Scanner.java:2221)
    at ec.edu.espe.dailyDev.view.LandingPage.showMainMenu(LandingPage.java:180)
    at ec.edu.espe.dailyDev.view.LandingPage.showLogin(LandingPage.java:86)
    at ec.edu.espe.dailyDev.view.LandingPage.showLandingPage(LandingPage.java:43)
    at ec.edu.espe.dailyDev.view.DailyDevSystem.main(DailyDevSystem.java:11)

C:\Users\Carlos\Downloads\dist\dist>

Select one option:
1. Task
2. Meeting
3. Create daily message
4. Logout
3
Good morning team,\nI hope you all had a productive day yesterday. Here's a quick update on my progress and plans for today.\nYesterday, I focused on two tasks:\n1. TestCase 65623: I have completed this test case successfully. It involved extensive testing and debugging to ensure the functionality is working as expected. I'm pleased to report that all test scenarios have passed, and the code is ready for further review.\n2. Task888: This test case was due yesterday, and I'm happy to share that I have completed it on time. It involved writing detailed test scenarios, executing them, and documenting the results. The finalized test case has been submitted for review.\nMoving on to today's plans:\n1. Review: I will spend some time reviewing the test cases I worked on yesterday. This will involve double-checking the steps, verifying expected results, and ensuring adequate coverage of test scenarios. I want to make sure everything is in order before proceeding further.\n2. Pending Tasks: I have identified two pending tasks that I would like to address today. Here they are:\n    - Task881: This task involves creating a new test case for a specific scenario. I will be analyzing the requirements, defining test criteria, and designing test steps to cover the scenario thoroughly. My aim is to complete the initial draft by the end of the day.\n    - Task882: This task is related to optimizing an existing test case. There is room for improvement in terms of efficiency and coverage. I will be analyzing the code, identifying bottlenecks, and making the necessary modifications. By the end of the day, I aim to have a more optimized version of the test case ready for review.\nHowever, there is one challenge that might impact my progress. I have encountered an unexpected blocker:\n- System Outage: Unfortunately, we are experiencing a system outage today. This means I won't be able to access the necessary resources for a certain period of time. While this is beyond my control, I will do my best to utilize this downtime efficiently by reviewing documentation and brainstorming ideas for future tasks.\nThat's it for today's update. If you have any questions or suggestions, please feel free to reach out. Let's continue working together to ensure the quality of our product.\nBest regards,\n\n[Your Name]

C:\Users\Carlos\Downloads\dist\dist>

Glacial
Login successful

Main Menu

Select one option:
1. Task
2. Meeting
3. Create daily message
4. Logout
2
Main Menu
1. Create a meeting
2. Show meetings
3. Update a meeting
4. Delete a meeting
5. Exit
Enter your choice: 3
Updating a meeting...
Meeting List:
Cannot invoke "java.util.List.iterator()" because "ec.edu.espe.dailyDev.model.Meeting.meetingsList" is null

```

## 5. UML

- a. Use Case Diagram 8/10
  - Complement in the functions -1
  - specific where the api slack will be -1

- b. Class Diagram 4/10
  - Missing verbs in the dependency -1
  - Missing task methods -1
  - Wrong dependency in project -Task -1
  - Wrong dependency in project -Schedule -1
  - Missing at least 10 methods -1
  - Missing one class in the diagram -1

## 6. Test Cases 20/10

- 7. Code Quality 7/10
  - many comments in a row -1
  - commented lines of code -1
  - capital letter in an attribute -1
- 8. Validation 10/10
- 9. Verification 7/20
  - The login as developer doesnt work -1
  - The function add participants desnt exist -1
  - The log out administrator doesnt work -1
  - The ten test cases -10