# Sonar Requirements Document

### 1. Introduction

#### 1.1 Overview

Sonar is a Chrome extension that enables users to receive read receipts on their sent emails and track respective metrics and data that will be integrated into the pre-existing Gmail inbox interface. This extension will enable users to track emails in academic settings, job search, free-lance etc.

### 1.2 Scope of the Product

For this build Sonar is exclusively a web application with interface being a Chrome Extension. Furthermore, focus would be on users being able to track whether their sent emails have been read and receiving the read receipts for read emails sent via the user's Gmail account.

Sonar offers its users read receipts for their outgoing emails. The core product, once downloaded/activated, will track emails that the user sends, and display the "read-status" (simply, whether or not it was opened) of the email to the sender.

The product integrates seamlessly into the email itself. After an email is sent with Sonar, the sender will be able to see their email's read-status both in the sent email itself and from the "Sent mail" list view. Sonar will never interfere with the legibility of the email itself.

Furthermore, Sonar should work regardless of the platform (mobile, desktop) that the sender and recipient are utilizing, and unimpeded as well by the email host of the recipient (Outlook, Gmail, Yahoo, etc.)

## 2. General Description

#### 2.1 Product Functions

Sonar will enable the user to track sent emails and know if the email has been opened/read by integrating seamless read notifications to Gmail emails similar to the WhatsApp read receipts. The user would be able to perform following actions:

- 1. Receive read receipts for user sent emails that have been read.
- 2. Ability to toggle Sonar on/off for specific emails or recipients (this will be contained within the premium feature set)
- 3. Conditional Nudge ("Echo") Reminder sent to the sender if the recipient has not opened the mail for a configurable specific amount of time.
- 4. Native Sonar Dashboard Basic Account Functionality: Enables users to view their current plan and profile details
- 5. Admin dashboard Enables the owners of Sonar to change account level settings i.e., upgrade an non-premium account to Premium account and vice versa as well as view all the currently registered users in Sonar.

#### 2.2 User Characteristics

The Sonar chrome extension requires a Gmail account, and the user can sign-in with the same to receive read receipts. It can be used in academic settings, track job related follow up emails and freelance emails.

The sender will not be able to receive the read receipts for a sent email in the following scenarios:

- 1. Sender's Gmail account is not signed up on Sonar when he/she sends the email.
- If the receiver's mail client blocks externally hosted images, their email client doesn't support background images or there exists a firewall which blocks access to the image server.

#### 2.3 General Constraints

The extension will be compatible with Gmail mailbox. After an email is sent with Sonar, the sender will be able to see their email's read-status in the Sent box list view. Sonar will not interfere with the legibility of the email itself.

### 2.4 Assumptions and Dependencies

The following assumptions and dependencies are being made as part of implementation:

- 1. The extension will work only on chrome browser.
- Only Gmail account users will be able to use this extension.
- 3. The infrastructure and application are expected to support <100 users as part of this deliverable and can be scaled further to accommodate increasing numbers of users.

The following assumptions and dependencies exist as part of Testing:

- 1. Testing Gmail accounts would be provided by the client.
- 2. UAT testing will be performed by the client.
- 3. UI/UX design support will be provided by the client.

## 3. Specific Requirements

## 3.1 User Requirements

Users are expected to give permission through their Gmail account to the SONAR application. Also, chrome extension needs to be installed on the sender's browser & given permissions to access the Gmail account to make use of Sonar features. As soon as an email is read, each email in the recipient sent box will receive a "Opened" besides the email.

Users will be able to perform following actions:

- 1. For Non-Premium users will be able to sign up and login using Gmail credentials to the SONAR application with Oauth2.0 and check the read receipts in the sent mail.
- Premium users will be able to toggle on/off Sonar for specific email.
- 3. Premium users will have nudge functionality which when enabled will provide them reminders after configurable specific amount of time (Days, Hours and Minutes) if someone has not viewed their email for specified amount of time.
- 4. Users will be able to view their profile information and available plans.

## 3.2 System Requirements

Gmail API will be used to access the mails from SONAR Application.

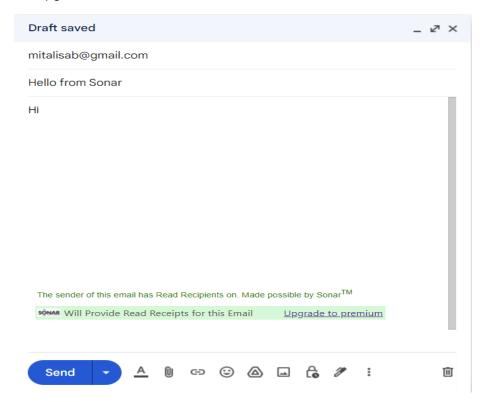
System will be able to capture & store the timestamp at which the email was first read by the recipient. This will then be displayed on the Gmail UI Interface.

## 3.3 Interface Requirements

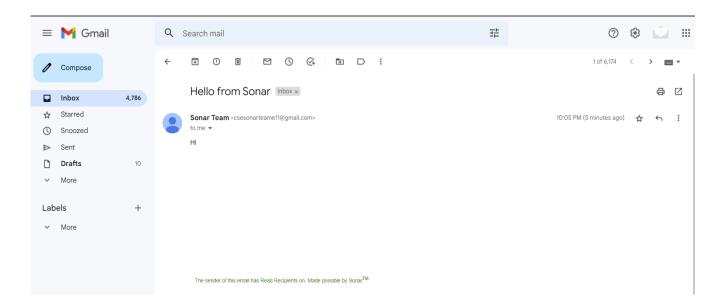
1. Sign-in page displayed after the extension has been installed



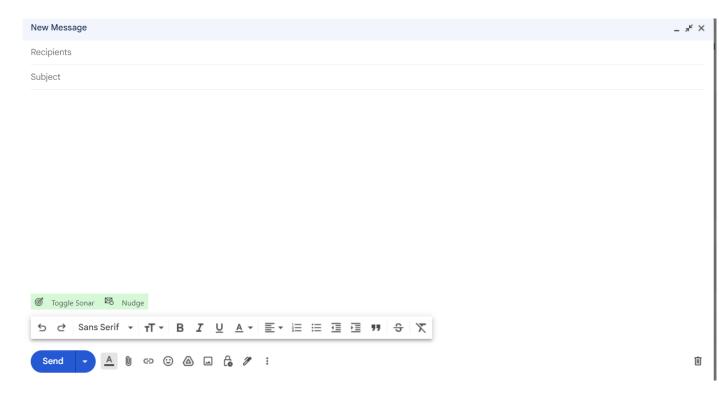
2. Sender side – Compose email view for non-Premium users. The tool box will show a link to "Upgrade to Premium".



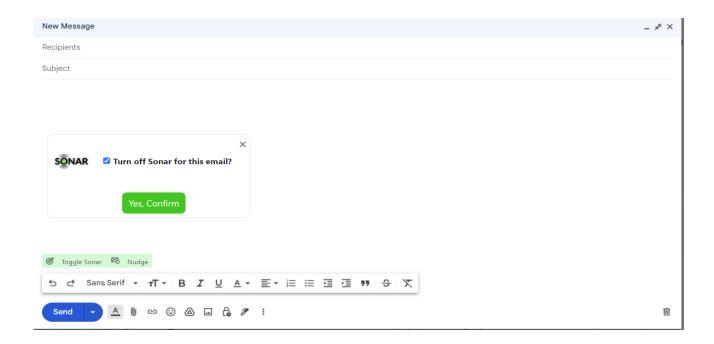
3. Recipient Side – Received email will have a watermark as "The sender of this email has Read Receipts on.Made Possible by SonarTM".



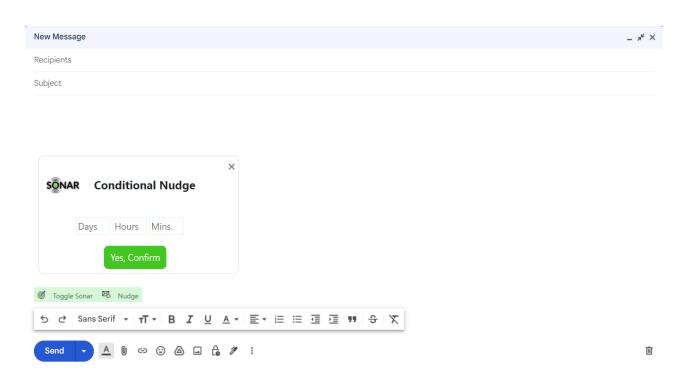
4. Sender side – Compose view for Premium users. The tab will show two options for this toggle and nudge.



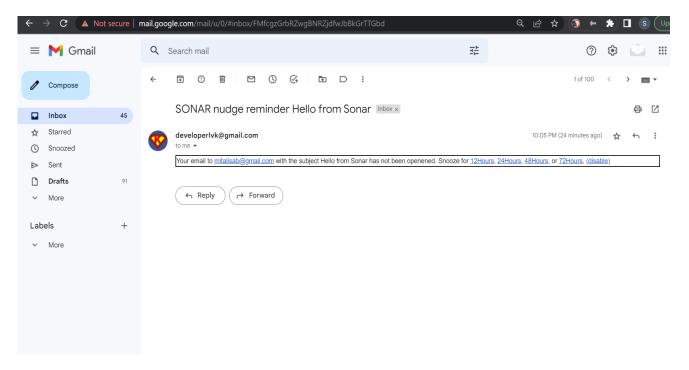
5. On Click of "Toggle" Sonar option following pop up will be shown -



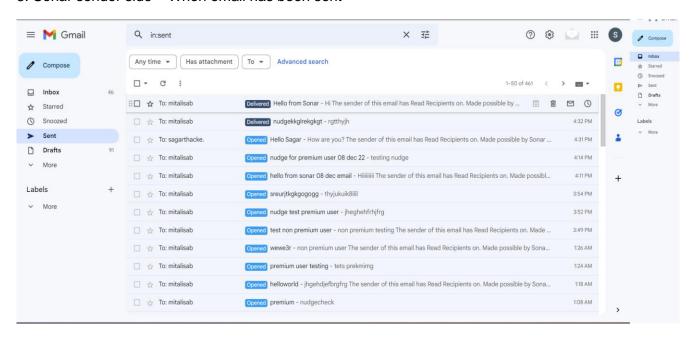
6. On Click of Nudge following pop up will be shown -



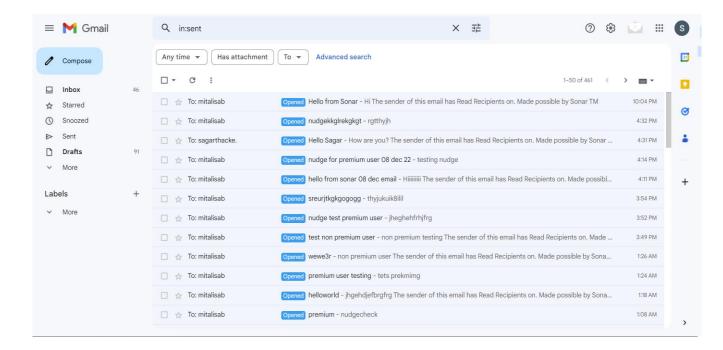
#### 7. Automated email for Nudge reminder



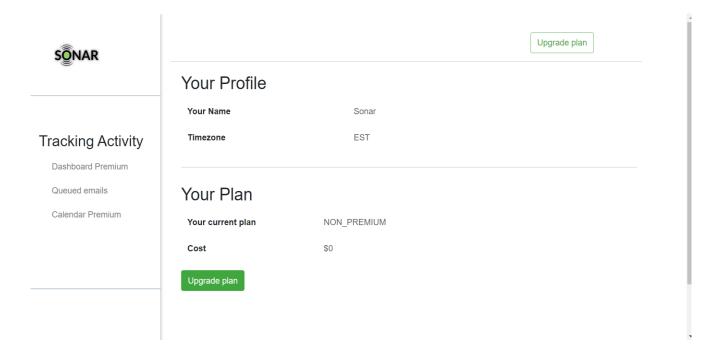
8. Sonar sender side - When email has been sent



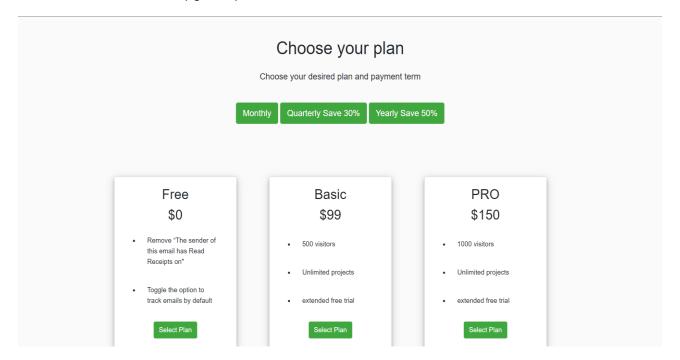
9. Sonar sender side – When email has been opened by the receiver



10. Basic Free Version Dashboard for displaying user profile and plan options

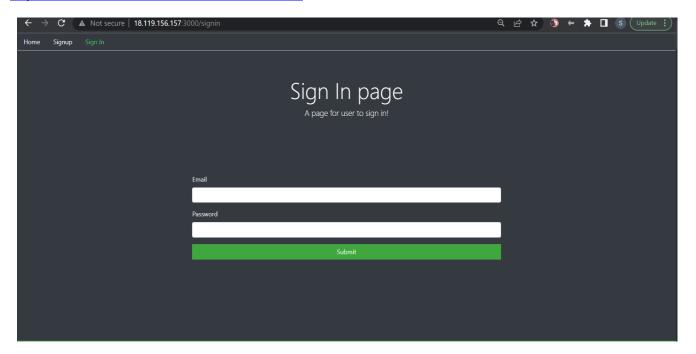


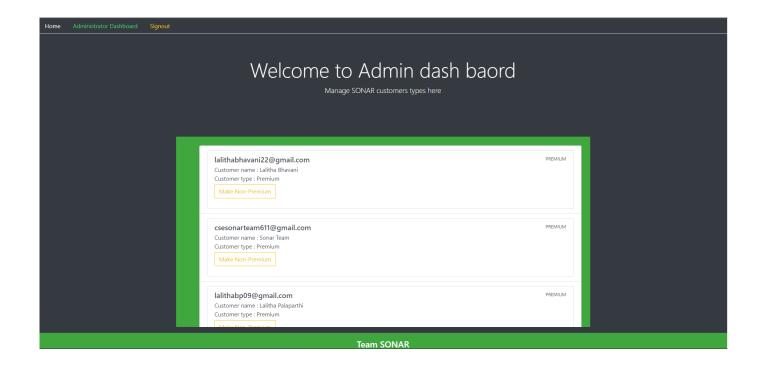
#### 11. Shown on the click of upgrade plan button -



#### 12. Sonar Admin Dashboard

#### http://18.119.156.157:3000/admin/dashboard





## 3. Appendices

N/A

# 4. Glossary

N/A

## 5. References

N/A