

AMMA - Antenatal Maternal Monitoring and Assistance App

Happy Motherhood 💋

Overview

AMMA (Antenatal Maternal Monitoring and Assistance) is a mobile application designed for pregnant woman as they suffer from slight memory loss so they can use this app to set reminders. If they dismissed the reminder the app sends mail to the husband and mother of pregnant woman to let them do follow up. The app is designed to support 21 languages in India so even the less educated woman can use the app. It supports expectant mothers during their pregnancy journey. The app provides various features to monitor and assist pregnant women, ensuring a healthy and happy pregnancy experience.

Technologies Used

- Programming Language: Java
- Development Environment: Android Studio
- Build Tool: Gradle 8.2.1
- Database:
 - Firebase for userID creation
 - Firestore for user collection creation
- Communication:
 - SMTP for sending emails
- Language Translation API:
 - Google Translate API for translating large amounts of text into different languages

Dependencies

- For database (firebase and firestore):
 - implementation("com.google.firebaseio:firebase-auth:22.3.1")
 - implementation("com.google.firebaseio:firebase-firebase:24.10.1")
- For SMTP:
 - implementation("com.sun.mail:android-mail:1.6.6")
 - implementation("com.sun.mail:android-activation:1.6.7")
- For Google translate:
 - implementation("com.google.cloud:google-cloud-translate:1.27.0")
- For YouTube videos integration:
 - implementation("com.pierfrancescosoffritti.androidyoutubeplayer:core:12.1.0")

Features

1. Reminder:

- The reminder rings with Ok and Dismiss buttons; if dismissed, an email is sent to the husband and mother for follow up.

2. Communication:

- SMTP integration for sending important emails, especially if the pregnant woman dismisses the reminder.

3. Multiple Language Support:

- Google Translate is integrated to provide language translation services, ensuring content accessibility in multiple languages so that even less educated woman can easily use the app. The app supports 21 Indian languages.

4. User Registration:

- Firebase is used for user authentication and to create unique userIDs for pregnant woman and she adds her husband and mother mail ids which are used to send email if pregnant woman dismisses the email.

5. Monitoring:

- The app utilizes Firestore to store and manage user-specific data related to pregnancy monitoring. Which is handled by Google so the data is safe and secure.

Usage Instructions

- 1. Internet Connection:**
 - A stable internet connection is required for real-time monitoring, communication, and language translation services.
- 2. User Registration:**
 - Users need to register using their email IDs, with Firebase handling the authentication process.
- 3. Monitoring Features:**
 - The app provides monitoring features to track various aspects of the pregnancy journey, including reminders.
- 4. Communication Services:**
 - Husband and mother of pregnant women will receive emails if the pregnant woman dismisses the reminder.
- 5. Language Translation:**
 - Google Translate ensures that content is available in multiple languages, enhancing user accessibility and easy to use for less educated woman.

How to Build

To build and run the application, follow these steps:

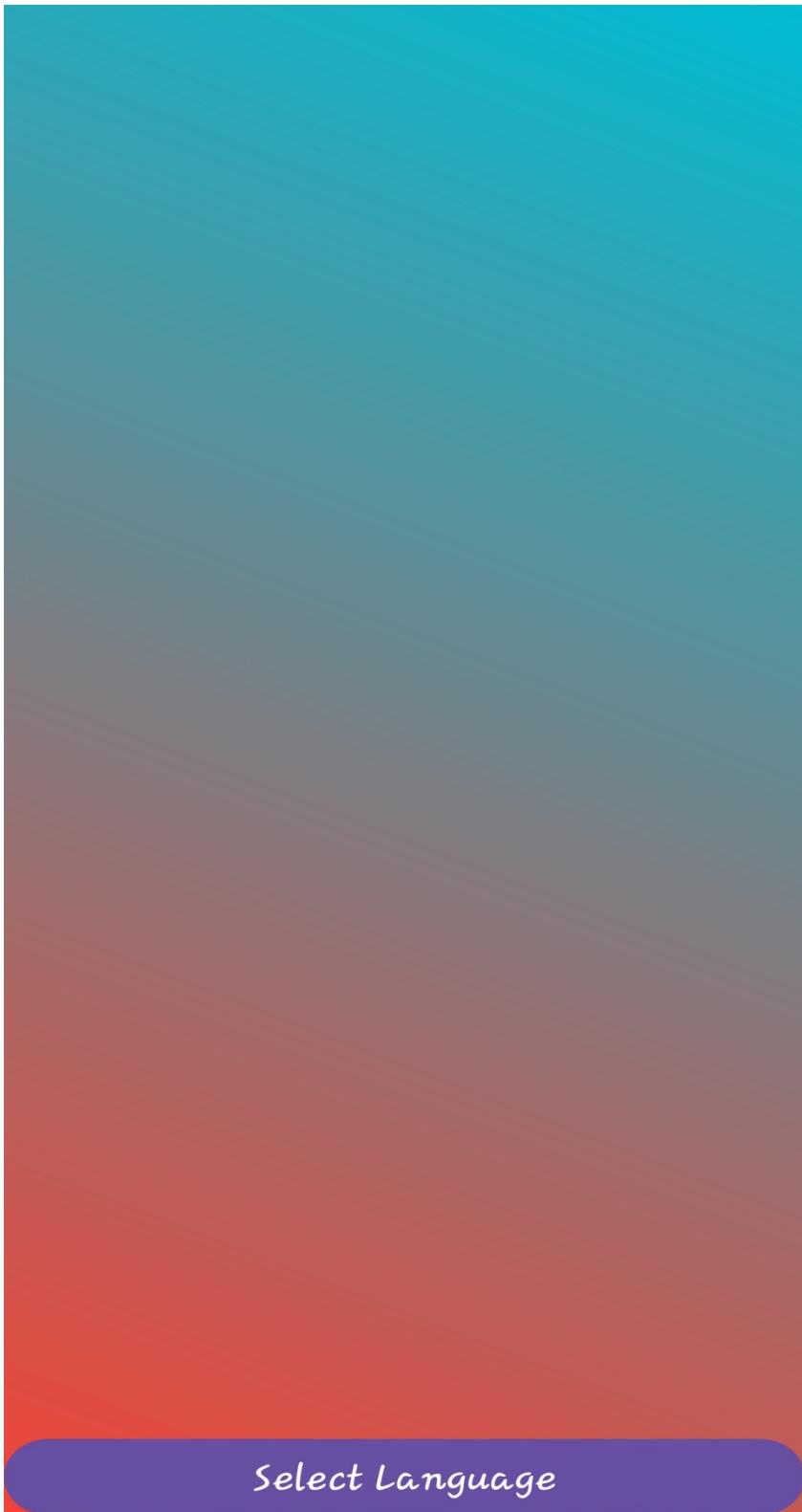
1. Open the project in Android Studio.
2. Ensure that the required dependencies are properly configured, especially Firebase and Google Translate.
3. Connect the project to a Firebase project and configure the necessary API keys.
4. Build the project using Gradle.
5. Run the application on an Android emulator or a physical device.

How to Use App (with Screenshots)

1. When the app is opened, it will show a splash screen like below:



2. Select language:



3. The supported 21 Indian languages are:

অসমীয়া

বাংলা

ଡোগরী

ENGLISH

ગુજરાતી

હિંદી

કશ્મીરી

ଠନ୍ଡୁଡ଼

କୋଟଣେ

ମୈଥିଲୀ

മലയାଲମ

ହାର୍ଦିଗ୍ରୂହିଙ୍କେ ଟେଞ୍ଚେ॥

ମରାଠୀ

ନେପାଲୀ

ଓଡ଼ିଆ

कश्मारा

कन्नूळ

कै०९८९९१

मैथिली

मलयालम्

मराठीगुरुमार्गे टेंडे॥

मराठी

नेपाली

उडिया

ਪੰਜਾਬੀ

தமிழ்

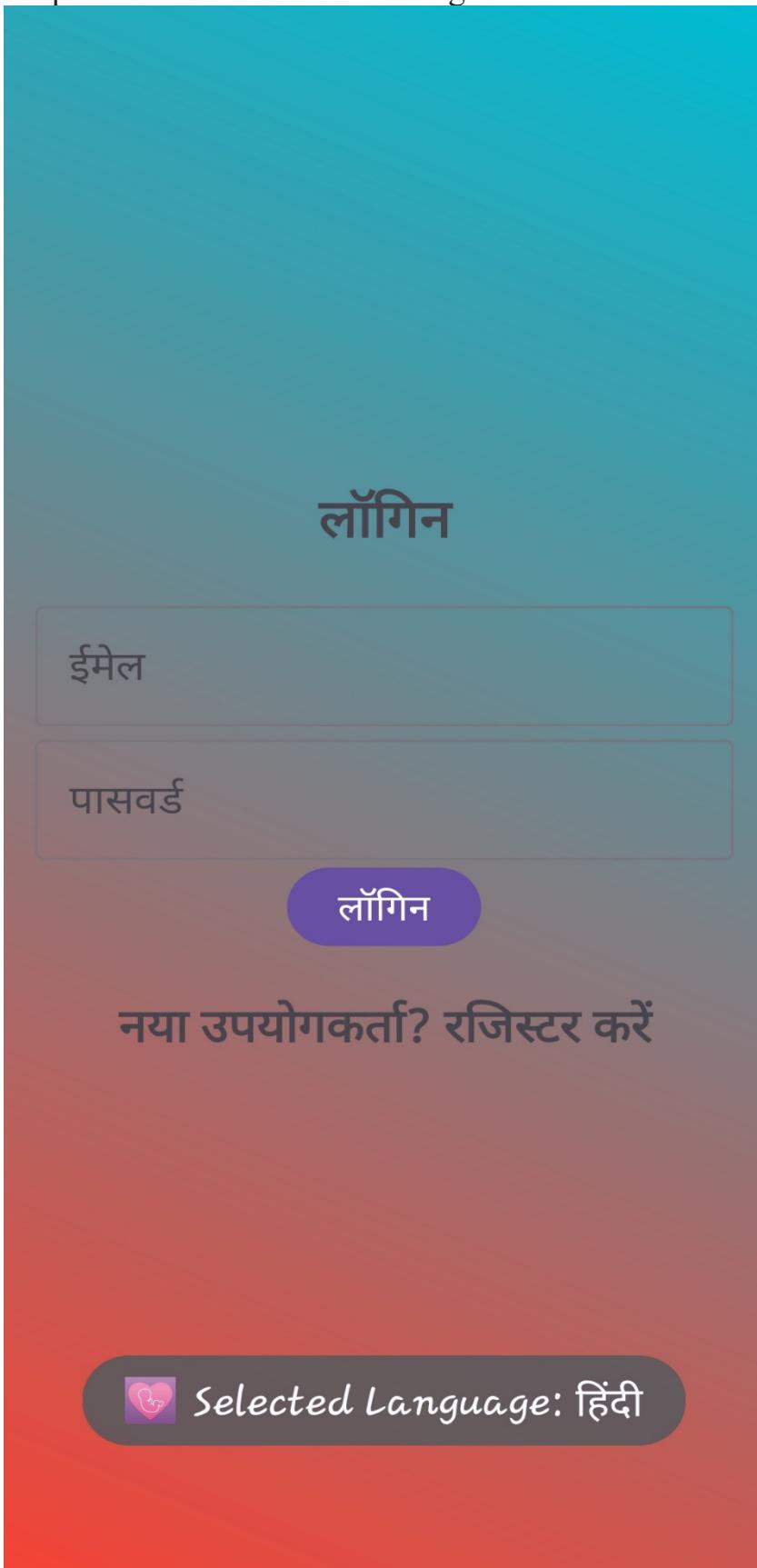
తెలుగు

சந்தாலி

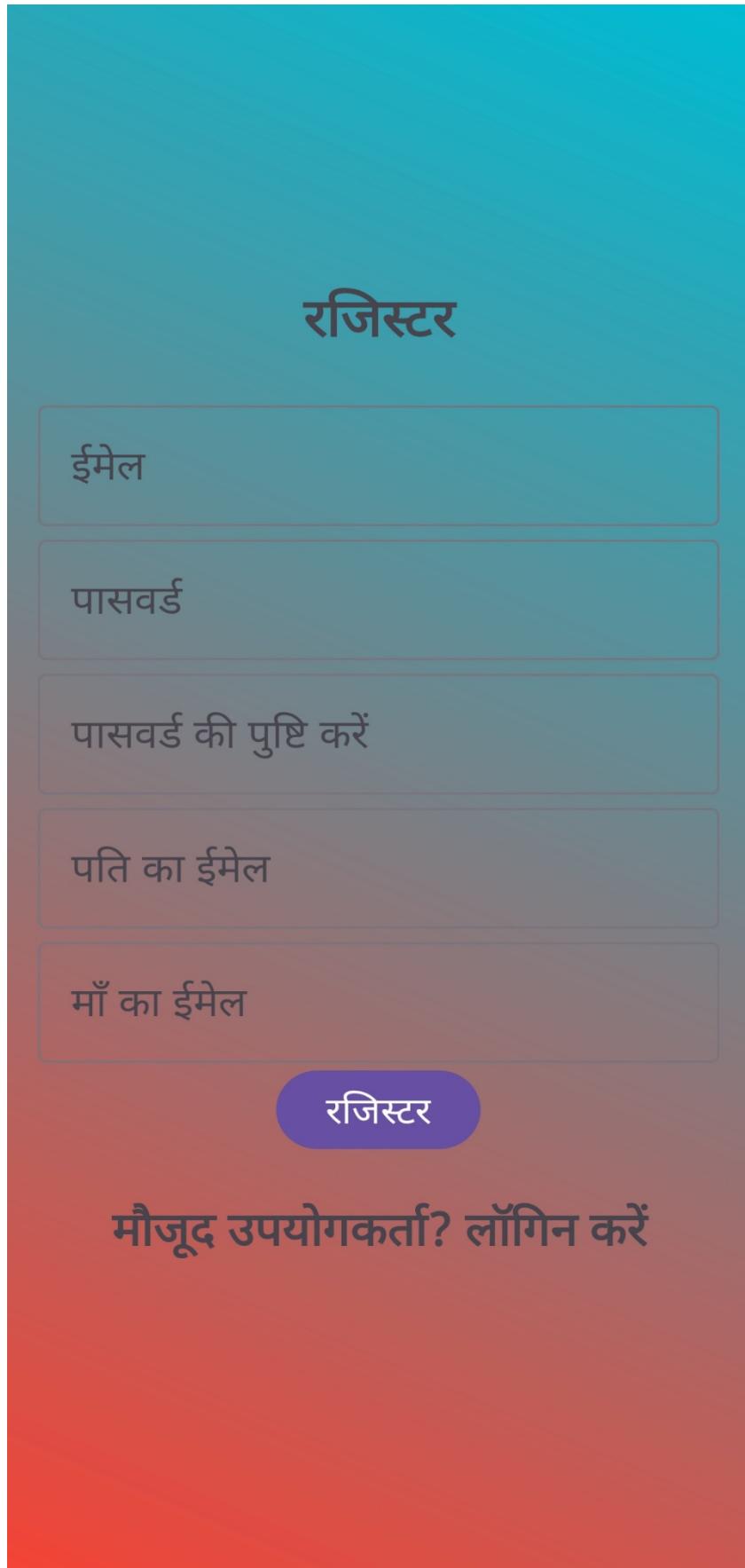
سنڌي

ગુજરાતી

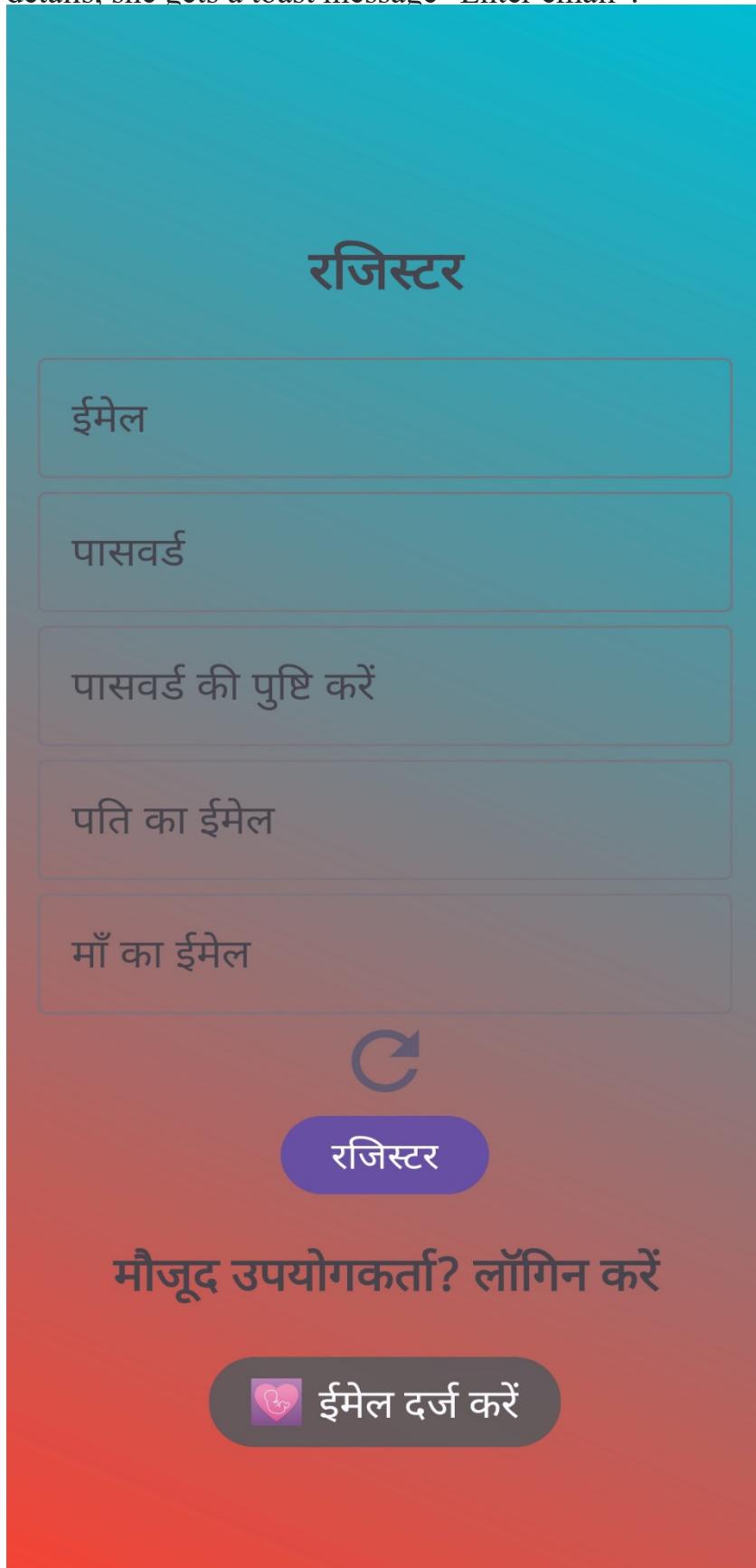
- When a language is selected, it gives a toast message, and the login page is opened. If a new user clicks register:



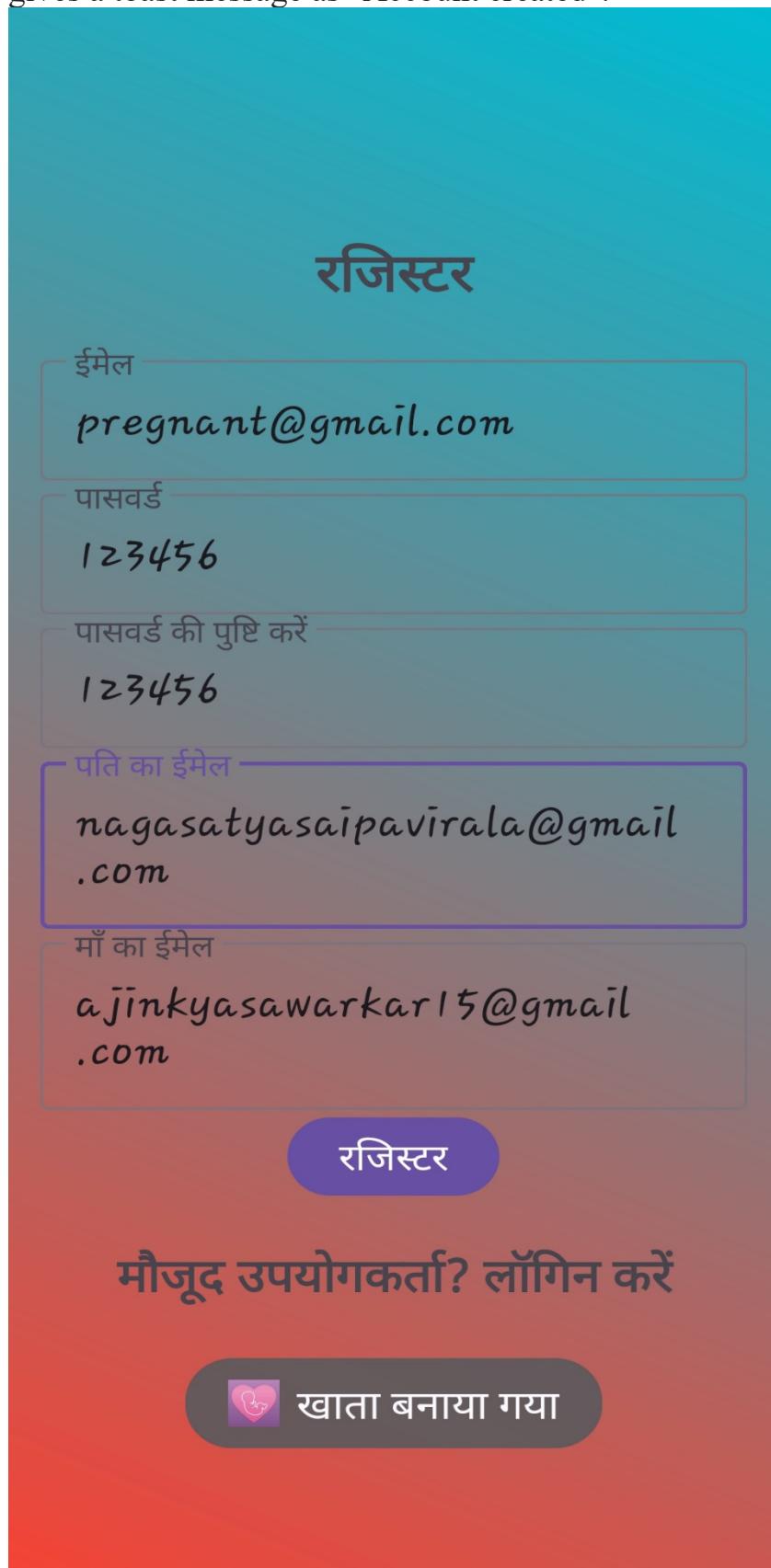
5. When the pregnant woman clicks register:



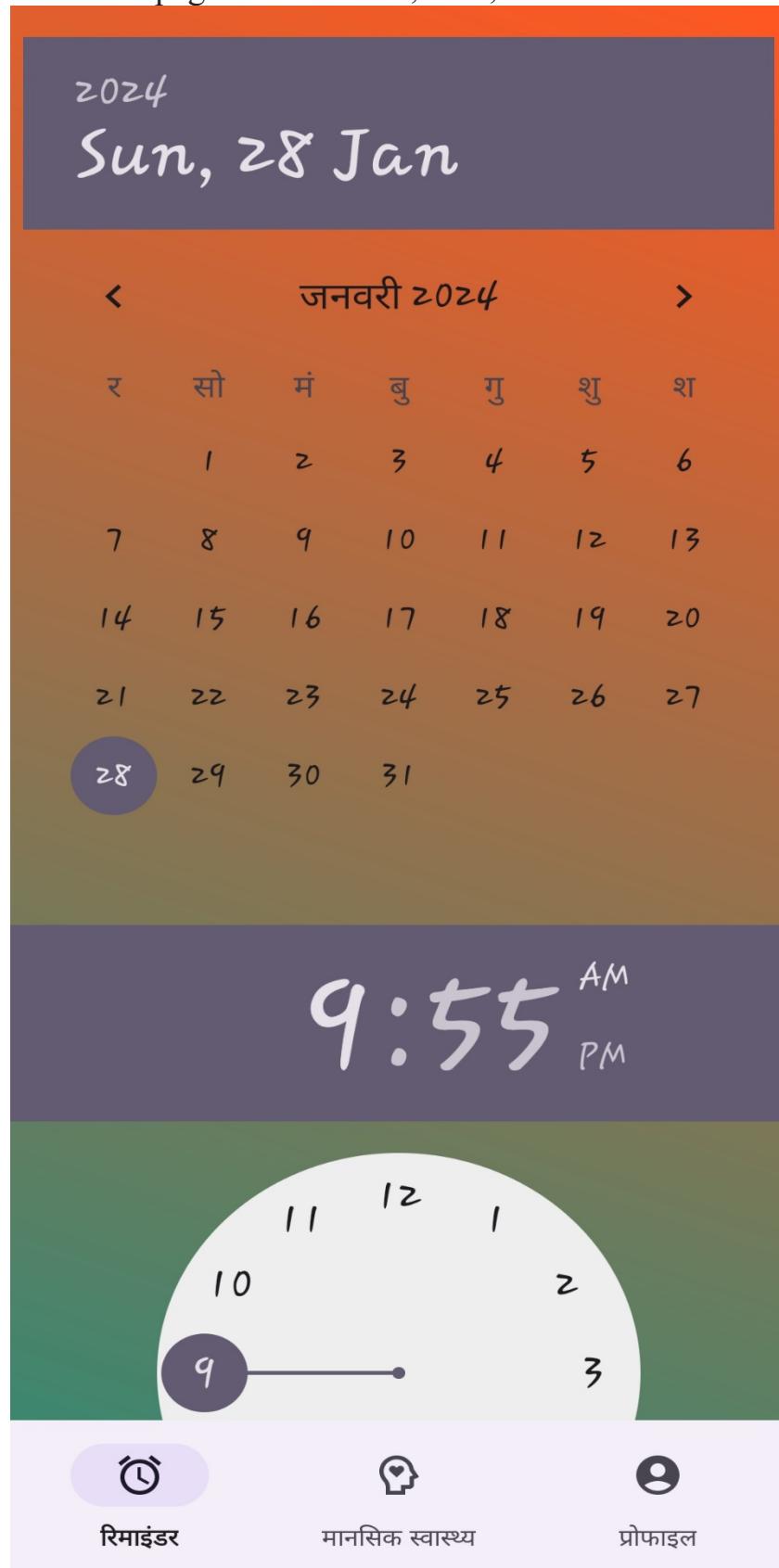
6. When the pregnant woman tries to click register button without entering details, she gets a toast message "Enter email":



7. Creating an account by providing details and pressing the register button gives a toast message as "Account created":



8. Reminder page to select date, time, set reminder name:



7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

9:55 AM
PM



रिमाइंडर का नाम

रिमाइंडर सेट करें



रिमाइंडर

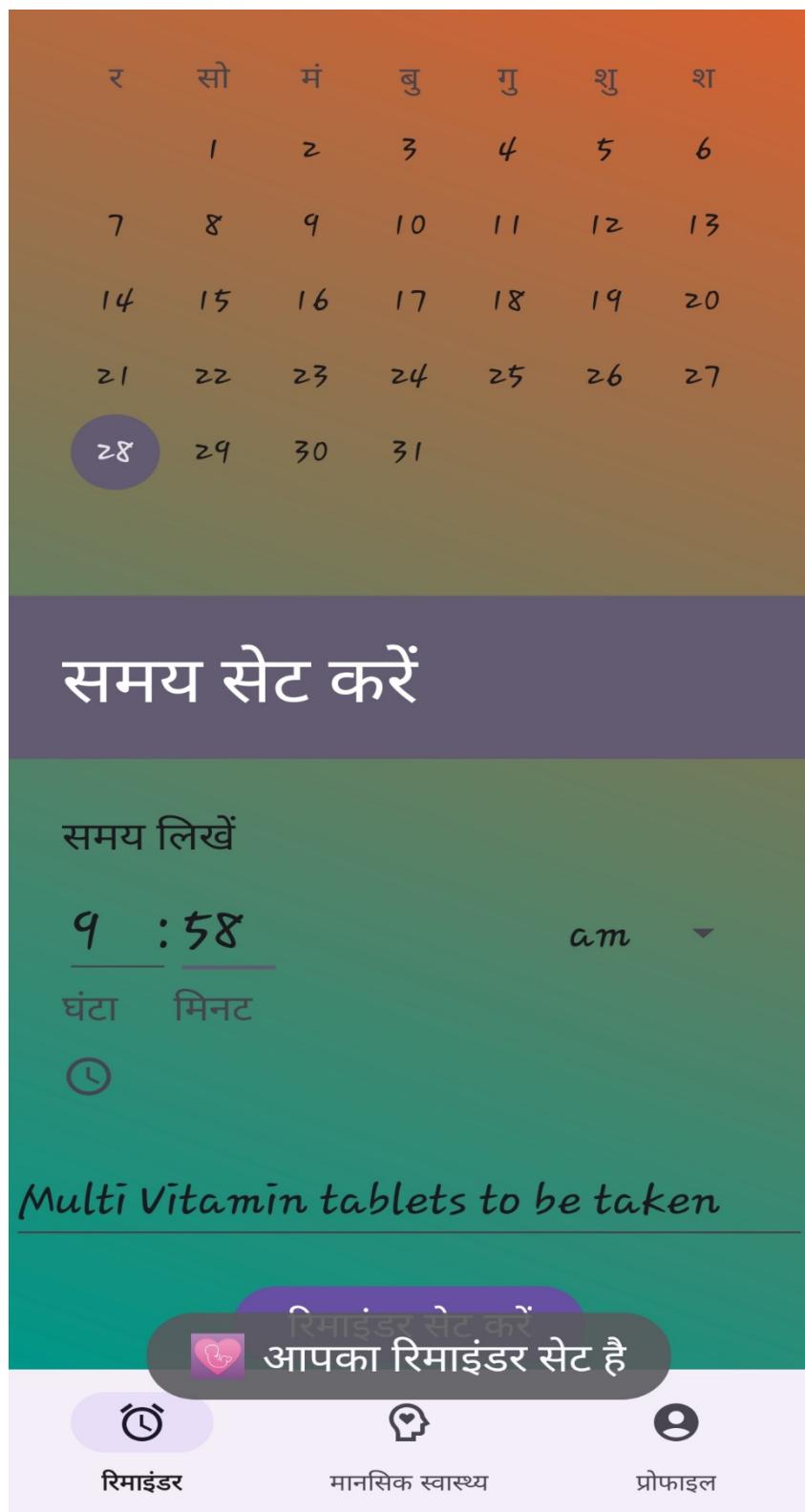


मानसिक स्वास्थ्य

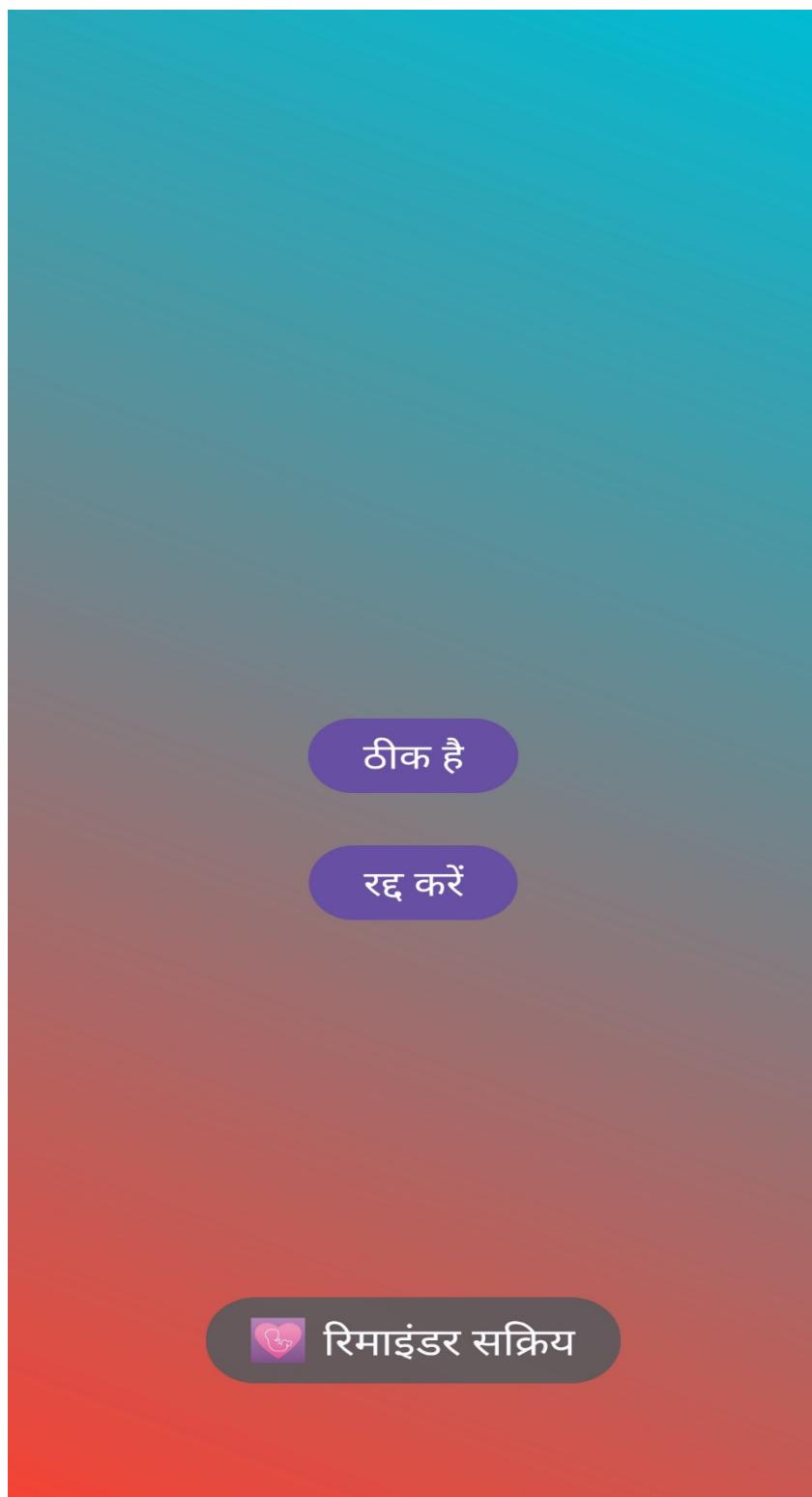


प्रोफाइल

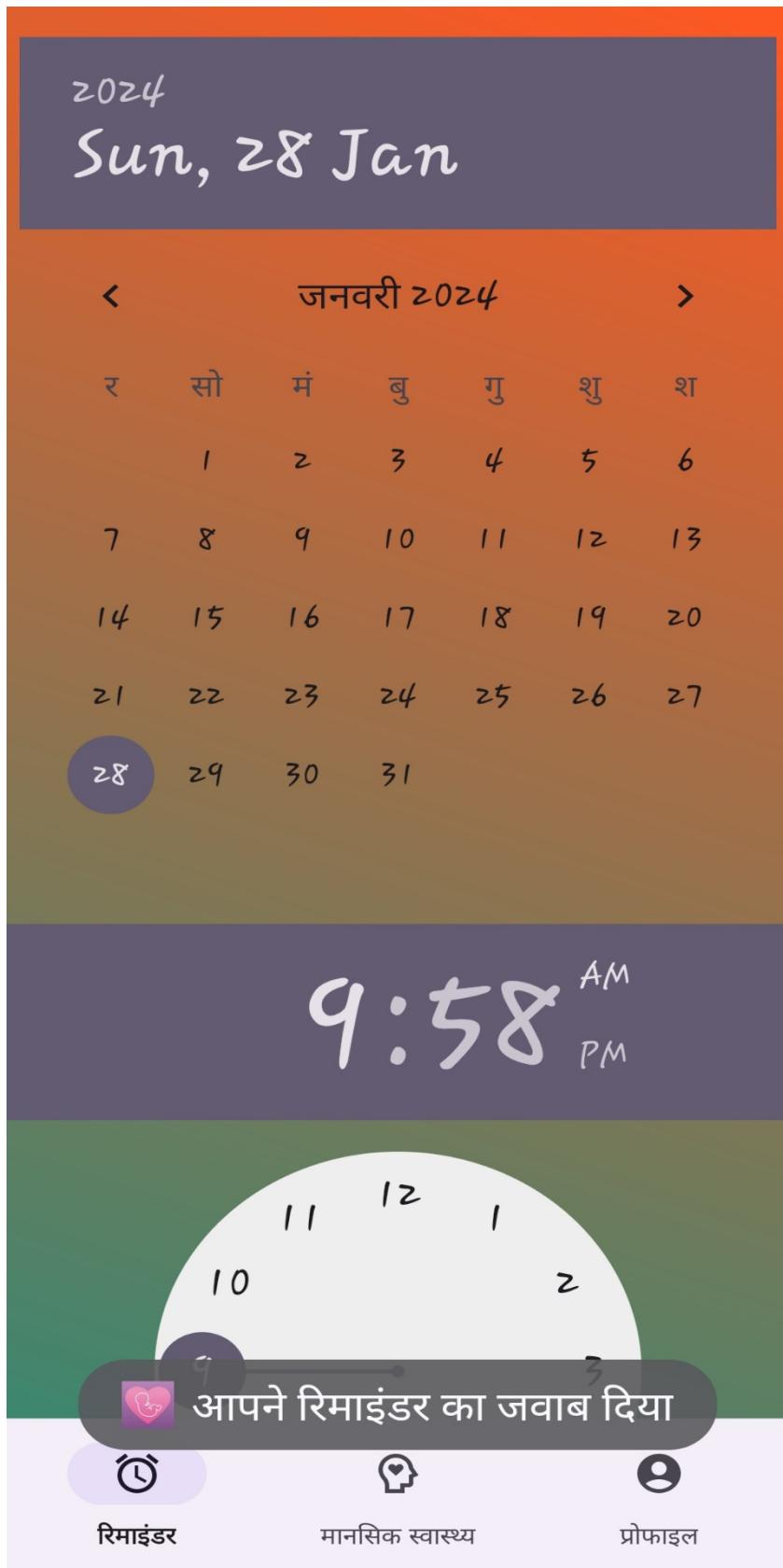
9. Setting a reminder by clicking set reminder then it will give a toast message as "Reminder set"



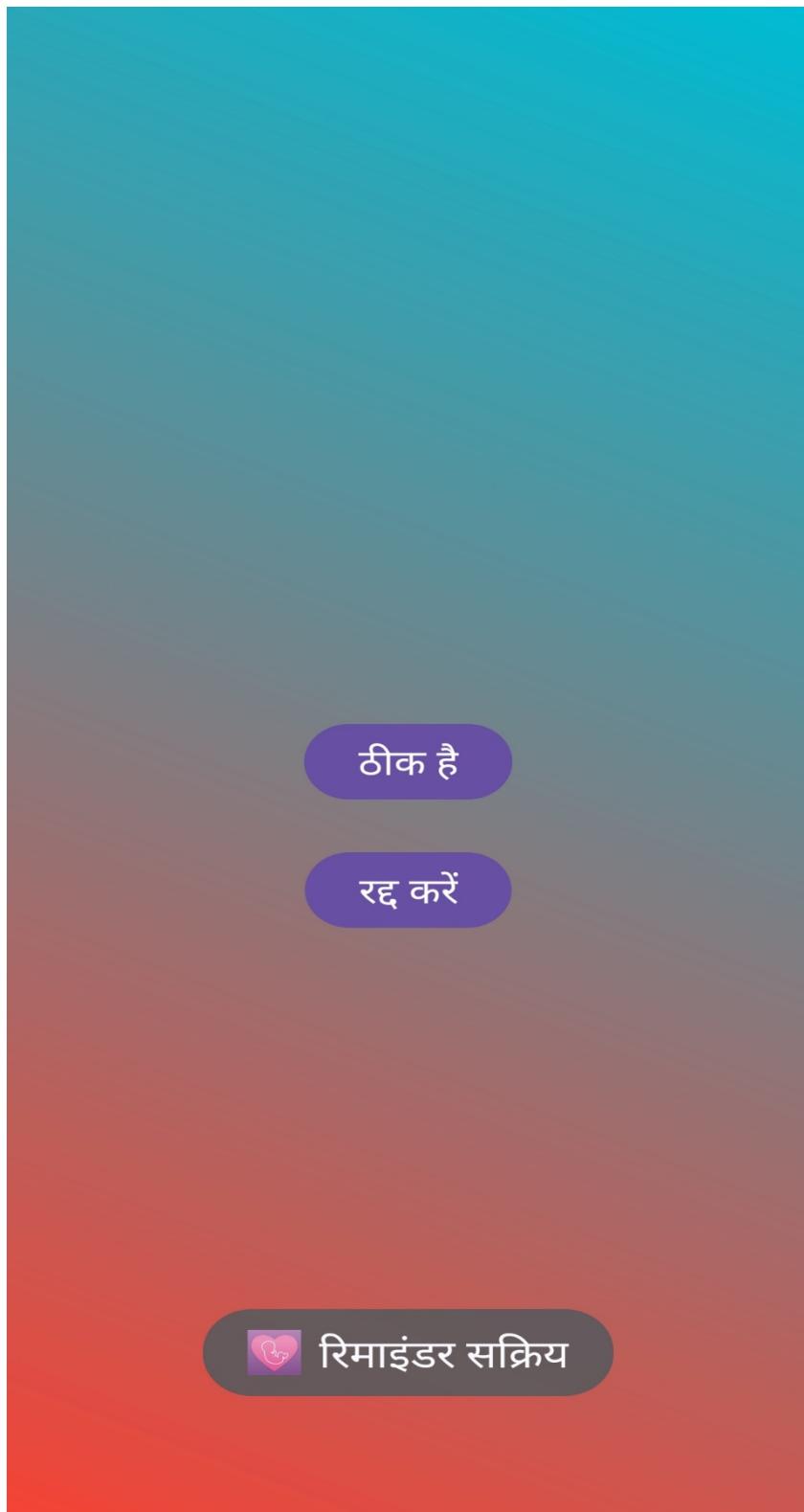
10. At set time, the reminder gets activated with a toast message "Reminder activated" and screen having two buttons Ok and Dismiss



11. If the pregnant woman takes required medicine or some reminder and clicks Ok then it gives a toast message as "You responded to reminder".



12. Again setting a new reminder, and if pregnant woman clicks Dismiss reminder, then app gives toast message as “You dismissed the reminder”.



13.A mail to husband and mother and pregnant woman is sent as pregnant woman dismissed the reminder. Please do follow up.



Subject: Message from
AMMA Inbox



p.nagasya... 9:13 am ← ⋮
to me, p.nagasya... ▾

Hello User,

Pregnant woman dismissed the
reminder
Please do follow her!

Regards,
support@amma.com



p.nagasya... 10:09 am ← ⋮
to me, ajinkyasaw... ▾

[Show quoted text](#)



10:20

VoLTE 52%



Subject: Message from
AMMA



Inbox



p.nagasaty... 10:09 am



to nagasatyasaipa... ▾

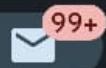
Hello User,

Pregnant woman dismissed the reminder
Please do follow her!

Regards,
support@amma.com



Reply all



14.Mental health content trimester-wise:

पहला तिमाही

दूसरा तिमाही

तीसरा तिमाही



रिमाइंडर



मानसिक स्वास्थ्य



प्रोफाइल

15.Food, Music, Meditation, Yoga:

भोजन

संगीत

ध्यान

योग



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प्रोफाइल

16.Food text translated using Google translate API:

फोलेट से भरपूर खाद्य पदार्थः रामदान
दलिया (अमरनाथ दलिया), सोया,
पालक, मटर, साबुत गेहूं टोस्ट, पपीता,
चना, सूजी, चुकंदर, सरसों का साग,
बाजरा (रागी) रोटी, अनार (अनार)
आयरन युक्त खाद्य पदार्थ (आपके
शरीर को आपके बढ़ते बच्चे के लिए
लाल रक्त कोशिकाएं बनाने में मदद
करने के लिए) : मूँग दाल, हरी मूँग,
मिश्रित दाल (मिलिजुली दाल), बाजरा
(बाजरे की रोटी), मूँगफली (मूँग
फली), उड़द दाल, कमल काकरी,
ज्वार रोटी, लाल मसूर दाल, मेथी
मेथी, राजमा, काला चना, सांभर , जई
(जई) विटामिन बी 6 से भरपूर भोजन
(सुबह की बीमारी में मदद कर सकता
है) : आलू, अरबी, केला सामान्य
भोजनः तरबूज, नारियल पानी, चीकू,
भिंडी, दही, चावल, चपाती, नींबू पानी,
विटामिन बी 6 से ज्वार की बीमारी



रिमाइंडर



मानसिक स्वास्थ्य



प्रोफाइल

17. Music section:

The image shows three vertically stacked screenshots from a mobile application. Each screenshot features a dark background with a nature scene (mountains and water) and a circular logo in the top left corner.

Screenshot 1 (Orange Background):

गर्भवती माँ और अजन्म शिशु के लिए संगीत
| शिशु का ब्रेन डेवलपमेंट संगीत | गर्भवती
महिलाओं के लिए संगीत

LULANKO

Pregnancy music for ... :

Pregnancy Music
For Mother And

relaxing music for pregnancy, baby kick in the womb

II 🔊 • Pregnancy ... ⚙ YouTube

Screenshot 2 (Dark Green Background):

अजन्म शिशु के लिए संगीत | ब्रेन डेवलपमेंट
क्लासिकल संगीत | गर्भ में शिशु के लिए
संगीत

LULANKO

Pregnancy music for ... :

SUBSCRIBE

Pregnant Music to make baby move in womb, music for baby in
mom's belly

● 🔊 ⚙ YouTube

Screenshot 3 (Teal Background):

गर्भ में शिशु के लिए संगीत | ब्रेन डेवलपमेंट |
रिलैक्सिंग सूथिंग संगीत गर्भवती महिलाओं के
लिए

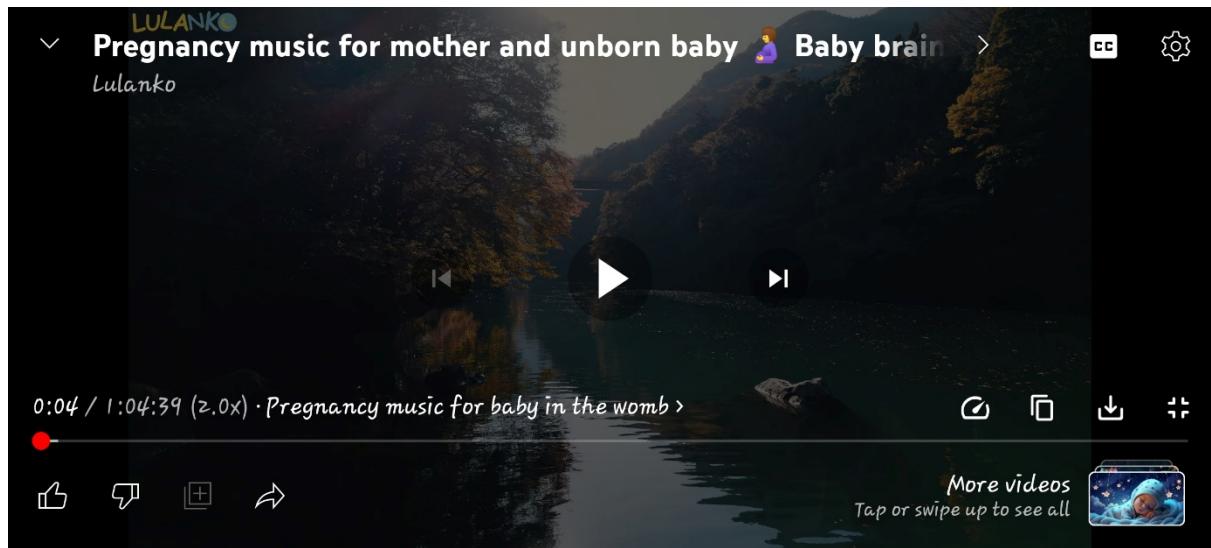
LULANKO

● 🔊 ⚙ YouTube

Bottom Navigation Bar:

- ⌚ (Rimai Indar)
- 🧠 (Manasik Swasthya)
- 👤 (Profile)

18.Playing video on Youtube:



19. Meditation videos:

गर्भधारण के दौरान ध्यान | गर्भवती महिलाओं
के लिए ध्यान टिप्स | गाइडेड मेडिटेशन |
राधिका अग्रवाल

गर्भधारण के दौरान ध्यान कैसे करें (हिंदी)

शक्तिशाली गर्भ चिकित्सा ध्यान | गर्भधारण
मंत्र | गर्भ संस्कार मंत्र

रिमाइंडर

मानसिक स्वास्थ्य

प्रोफाइल

20. Yoga videos:

The image shows three vertically stacked YouTube video thumbnails for pregnancy yoga, each featuring a woman in a blue top and black pants performing various yoga poses.

Top Video:
हिंदी में गर्भावस्था के लिए योग I ।-३ महीने
(पूर्ण अभ्यास)
पहली तिमाही के लिए जरु...
YouTube

Middle Video:
गर्भवती महिलाओं के लिए योग – भाग
1.mp4
YOGA FOR PREGNA...
YouTube

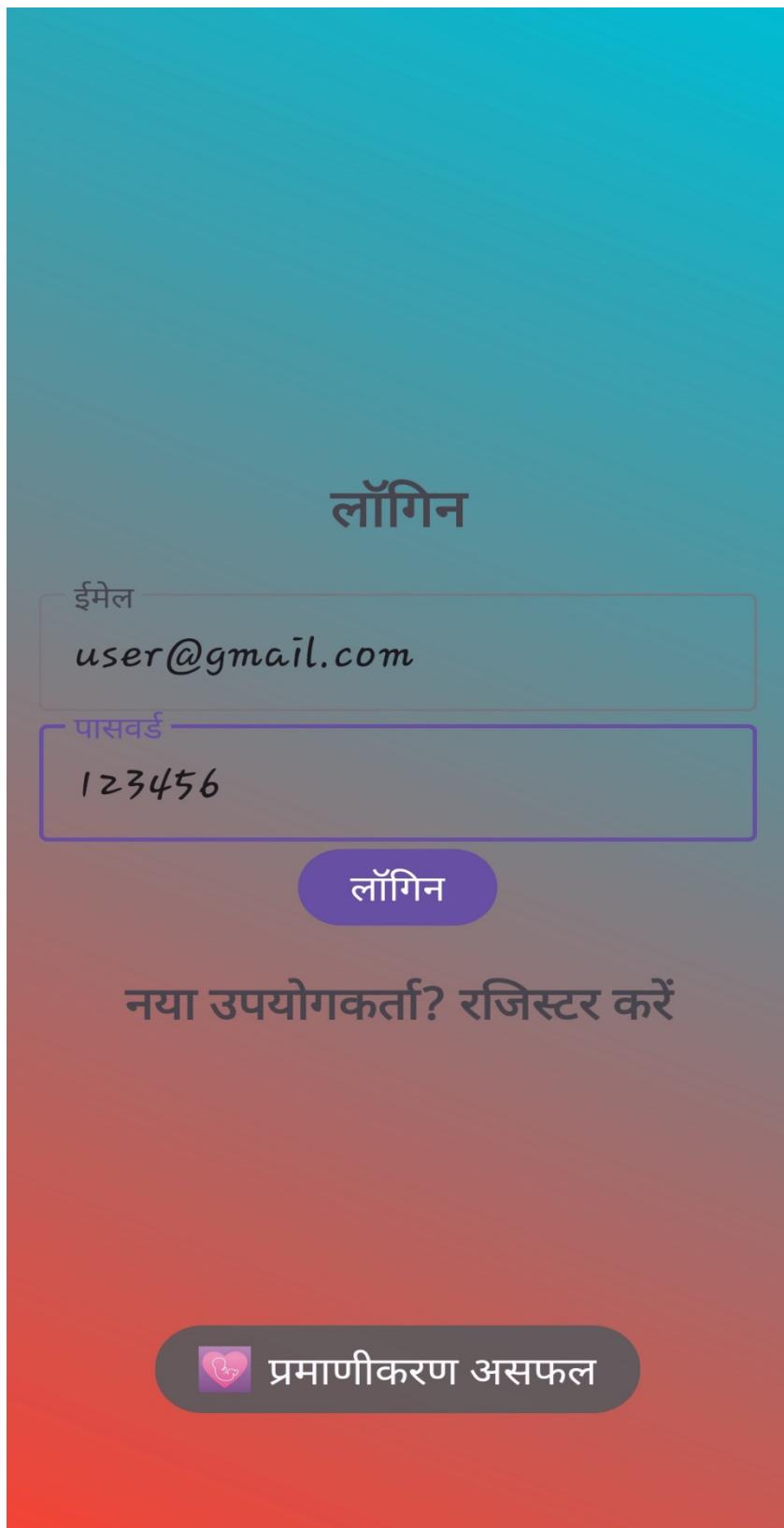
Bottom Video:
गर्भवती महिलाओं के लिए योग – भाग
2.mp4
YOGA FOR PREGNA...
YouTube

Bottom Navigation Bar:
रिमाइंडर मानसिक स्वास्थ्य प्रोफाइल

21. Profile section with registered user mail, husband mail, and mother mail:



22.Pressed logout button and tried to log in with wrong credentials giving toast message "Login failed".



23.Login by correct credentials of the user giving toast message "Login successful".

