

SARI NA – USER MANUAL

Camarines Sur Polytechnic Colleges (CSPC)

Version 1.0 – Android Release

1.) Introduction

SARI NA is a mobile navigation application designed to help **new students and campus visitors** explore the **Camarines Sur Polytechnic Colleges (CSPC)** campus with ease.

Built with the **Flet framework**, SARI NA provides:

- **Augmented Reality (AR)**–assisted navigation
- **Interactive campus map** with OpenStreetMap routing
- **User onboarding and account creation**
- **Role-based access** (Student / Visitor)

Whether you're a first-year student trying to find your classroom or a guest locating college offices, SARI NA makes campus navigation simple and intuitive.

2.) System Requirements

SARI NA is currently available **only for Android devices**.

Minimum Requirements

- **OS:** Android 8.0 (Oreo) or higher
- **RAM:** 3 GB or more
- **Storage:** At least 200 MB available
- **Camera:** Required for AR navigation
- **Internet:** Required for account creation, login, map routing, and some AR features
- **Sensors:**
 - Gyroscope (recommended for AR stability)
 - GPS for location services

3.) Installation

1. Download the SARI NA APK from the official CSPC distribution source.
 2. On your Android device, allow installation from trusted external sources (if prompted).
 3. Tap **Install** and wait for the setup to finish.
 4. Launch the app from your home screen or app drawer.
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4.) Getting Started

4.1) First Launch

On first launch, SARI NA automatically determines your app state.

You will see:

- **Opening Screen / Splash Screen** (3 seconds)
 - Redirect to:
 - **New User Setup**, if it's your first time
 - **Home**, if you are already logged in
 - **User Selection**, if you previously used the app but are logged out
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4.2) New User Setup

Guides first-time users through:

- Selecting your user type (Student or Visitor)
 - Understanding basic app functionalities
 - Moving to the signup screen
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5.) Account Management

5.1) User Types

SARI NA supports two user categories:

- **CSPC Students** – must use their **official CSPC email address** to sign up and log in.
- **Visitors** – may use **any personal email**.

5.2) Signup

To create an account:

1. Enter your full name
2. Select Student or Visitor
3. Provide a valid email
4. Create a secure password
5. Tap **Sign Up**

You will then receive an **email verification** prompt.

5.3) Email Verification

- Check your inbox for a verification code
 - Enter the code in the “Email Verification” screen
 - Once verified, your account becomes active
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5.4) Login

Enter your registered email and password to access the app.

If you are a CSPC student:

- You **must** use your CSPC email.
 - The app does not allow login using personal emails for student-type accounts.
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5.5) Forgot Password

If you lose access to your account:

1. Tap **Forgot Password**
2. Enter your registered email

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3. Follow the password reset instructions sent via email

6.) Home Screen Overview

Once logged in, you will be redirected to the **Home Screen**.

The Home Screen typically includes:

- **Navigation Options**
 - AR Guidance
 - Interactive Map
- **Recent Destinations Visited** (if used before)
- **Profile / Settings Shortcut**
- **Predictive Search for Destination Navigation**

From here, you can select how you want to navigate the campus.

7.) Campus Navigation Modes

SARI NA provides **two navigation methods** to help users explore CSPC.

7.1) Augmented Reality (AR) Navigation

AR View overlays digital guidance markers onto your camera feed.

Features:

- Real-time path guidance using AR arrows
- Camera-based directional navigation
- Automatically adjusts based on your movement
- Option to return to Home anytime via back button

How to Use AR Navigation:

1. Select **Start Navigating (AR)** from the Home Screen
2. Choose your destination (e.g., Buildings, Offices, Classrooms)

3. The app loads the AR camera
4. Follow the on-screen digital markers and directional arrows
5. Tap the **Back Arrow** to return to Home

If GPS or sensors fail, the app may suggest switching to the **interactive map mode**.

7.2) Interactive Map Navigation

The interactive map is built using **OpenStreetMap** and provides an alternative to AR.

Features:

- Full overhead view of the campus
- Automatic path routing
- Selectable destinations
- “Open in external map” option
- Ideal when AR mode is not available or unstable

How to Use the Interactive Map:

1. Choose **Map Navigation** on the Home Screen
 2. Select your desired location
 3. View the suggested path
 4. Follow the route displayed on the map
 5. Switch back to AR at any time
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8.) Settings

The **Settings** screen allows users to manage their account and app preferences.

Common options include:

- **Profile Information**
- **Logout**
- **Buy Us Coffee (Donation for Devs)**

- **Clear App Data**
- **About the App**

Settings may expand as new features are implemented.

9.) Troubleshooting

App shows a white screen during AR navigation

- Ensure the app received a valid route
- Check if camera permissions are enabled
- Try switching between AR and the map view
- Restart the app if needed

I can't sign up using my email

- Students **must** use their CSPC email
- Visitors should avoid using CSPC emails unless enrolled

GPS or Location Not Working

- Enable GPS and location permissions
- Move outdoors or near a window for better signal

AR View not loading

- Make sure your device has a functional camera
 - Try restarting your device
 - Switch to map view if the AR mode is lagging
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10.) Credits & Contact Information

For your concerns, you may contact the developers:

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