

User Documentation: ID Scanner System

Clarkson University – MakerSpace Check-In System

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General Users (Returning Students)

Goal: Quickly check in and out of the MakerSpace using your student ID card.

-Check-In Steps:

1. Walk up to the ID scanner station.
2. **Tap your student ID** on the RFID reader.
3. If you're already registered, you'll see:
 - **"Welcome back!"** message.
 - System logs the check-in time automatically.
4. That's it, you're checked in!

-Check-Out Steps:

1. Before leaving, **scan your ID again**.
2. A screen will appear prompting you to **select the machines you used**.
3. Select all applicable machines (checkboxes).
4. Press **Submit**.
5. You'll see a confirmation. You're checked out.

-Tip: If you forget to check out, the system will automatically log you out at 11:59 PM.

New Users (First-Time Visitors)

Goal: Register with the system and complete a digital waiver before using the MakerSpace.

-Registration & Waiver Steps:

1. Scan your student ID card.
2. The screen will display a "**New User Registration**" form.
3. Fill in your details:
 - Name
 - Email
 - Agree to waiver terms (checkbox)
4. Press **Submit**.
5. You'll receive a **confirmation** and be granted access.

-Once registered, future visits will skip this step!

-Admin Users

Goal: View logs, usage reports, and monitor MakerSpace activity.

-Admin Access:

Admin features are **secured by login** and only available to authorized MakerSpace staff.

-Available Admin Functions:

1. **Login to the Admin Dashboard** (hosted on the Pi, local network access required).

2. View Activity Logs:

- Check-in/check-out records with timestamps.
- Machine usage breakdown.

3. Export CSV Report:

- Download usage data for review or analytics.

4. (Optional) SSH Access:

- Admins can SSH into the Raspberry Pi to perform updates, backups, or database inspection.

-Please DO NOT expose this dashboard to the open internet. Keep access limited to trusted devices and networks.

-Accessing the System on a Tablet or iPad

1. Make sure the device is **on the same Wi-Fi network** as the Raspberry Pi.
 2. Find the Pi's local IP address.
 3. Open a browser and go to:
[http://\[Raspberry_Pi_IP_Address\]:5000](http://[Raspberry_Pi_IP_Address]:5000)
 4. The web interface will appear and function the same as the touchscreen UI.
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-Troubleshooting

Problem	Solution
No screen appears after scanning	Ensure the Flask app is running. Reboot the Pi if needed.
ID not recognized	New user? Fill out the waiver form on screen.

Admin dashboard not loading	Check network connection and Flask server status.
Data missing or incorrect	SSH into the Pi and inspect the SQLite database manually.