

CENG-322 Deliverable 6

Team #1 - Algaerithms Inc.

Project name - Phytoplankton-based air purifiers

Name	Student ID	Github ID	Signature	Effort
Julian Imperial	N01638310	JulianImperial8310	J.I	100%
Dhairya Pal	N01576099	DhairyaPal6099	D.P	100%
Sanskriti Mansotra	N01523183	SanskritiMansotra3183	S.M	100%
Dharmik Shah	N01581796	DharmikShah1796	D.S	100%

Brief description of the project - A smart and eco-friendly air purification system that uses phytoplankton to naturally convert CO₂ into oxygen. The system connects with an Android app for real-time monitoring, automated alerts, and sustainability-focused feedback.

Github repo link - <https://github.com/Algaerithms-Inc/PhytoplanktonAirSystems>

List number of commits for each member for this sprint only. Create a table:

Team member (Commits)	Julian Imperial	Dhairya Pal	Sanskriti Mansotra	Dharmik Shah
August 7	0	0	0	0
August 8	0	0	0	0
August 9	0	5	2	
August 10	0	6	10	0

Describe in detail, the work that has been completed by each team member since Aug 7th.

Dhairya – Took ownership of resolving last-minute resource conflicts and bug fixes to ensure a smooth final build of the application. He created the Android keystore and handled the technical steps required for a secure app release. Dhairya then successfully uploaded the app to the testing platform and coordinated the onboarding of testers by sending out invitations.

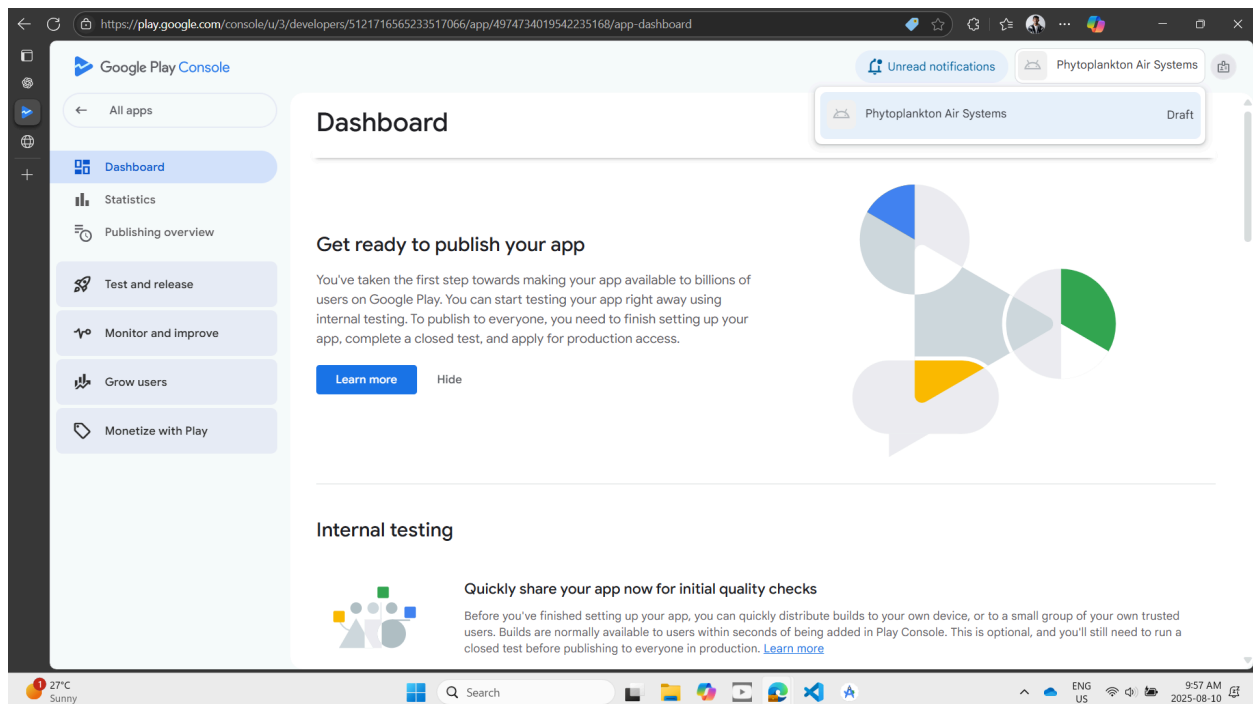
Dharmik – Focused on completing the final design and functional touchups for the dashboard, ensuring it was polished and user-friendly before release. He collaborated with the team to align

the UI with the overall app experience. Once the dashboard was finalized, Dharmik assisted in the distribution process by inviting testers to try out the app.

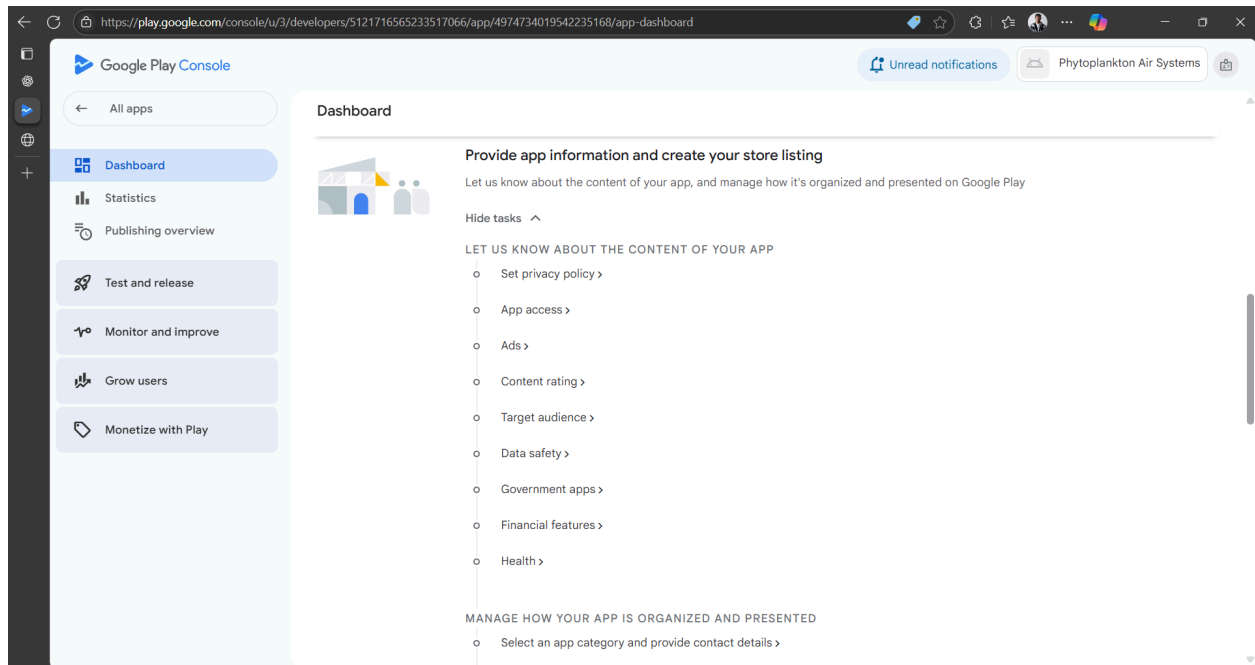
Sanskriti – Developed and published the required compliance webpages, including the account deletion page and the privacy policy, to meet platform and user requirements. She ensured these pages were properly linked and accessible from the app. In addition, she took part in distributing the app by inviting testers and gathering initial feedback.

Julian – Contributed directly to the completion of the final deliverable, assisting in areas where additional support was needed to meet the deadline. He collaborated closely with team members to wrap up pending tasks. Afterward, Julian also took responsibility for inviting testers to the app and helping with the rollout phase.

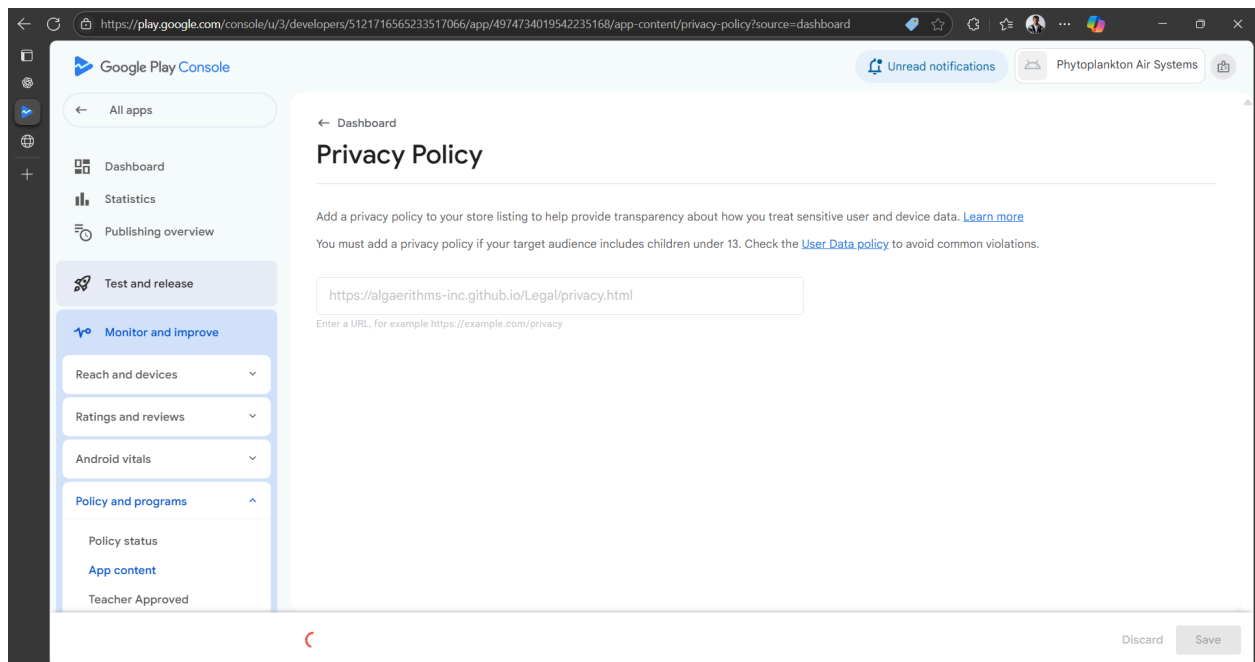
13. Provide screenshots on how you uploaded into Google play. Provide screenshot of the App submission into Google Play, and screenshot showing the status. Also show clearly the date the app submitted into Google Play.



I went to Google Play Console, signed in as the email used to create the developer account, and clicked on Create an App. I named the app 'Phytoplankton Air Systems' and chose the app language and whether it's free or paid, and then it landed me here.



I filled out these details then - including the link for Privacy policy:



Then I submitted the credentials aaa@bbb.com and Admin101! For app testing:

The screenshot shows the 'App access' form in the Google Play Console. The form is titled 'Instructions for logging into my app'. It contains the following fields:

- Instruction name ***: A text input field with the value 'Instructions for logging into my app' and a character count of 36 / 60.
- Username and password**: A section with two sub-headers:
 - Username, email address, or phone number**: A text input field with the value 'aaa@bbb.com' and a character count of 11 / 100.
 - Password**: A text input field with the value 'Admin10!' and a character count of 9 / 100.

At the bottom right of the form, there are two buttons: 'Discard changes' and 'Add'.

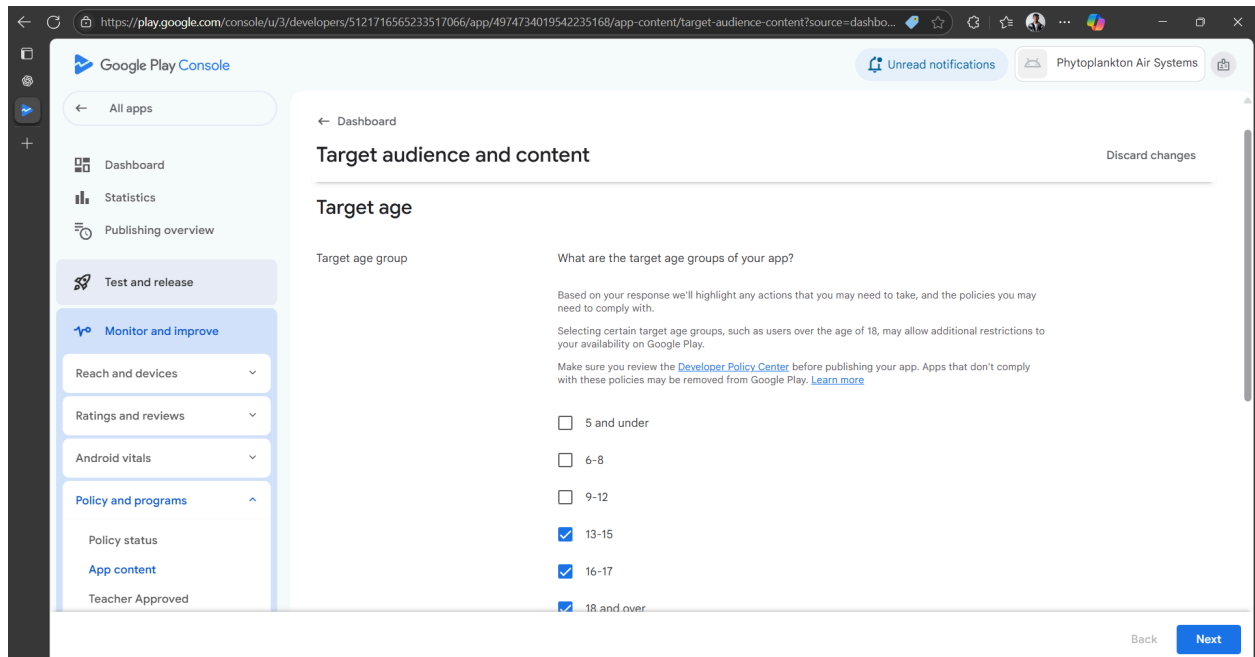
Then I filled out the form asking if my app contains any ads:

The screenshot shows the 'Ads' form in the Google Play Console. The form is titled 'Ads' and contains the following fields:

- Does your app contain ads? Check the [Ads policy](#) to make sure your app is compliant.**
- ☐ Yes, my app contains ads
The 'Contains ads' label will be shown next to your app on Google Play. [Learn more](#)
- ☒ No, my app does not contain ads

At the bottom right of the form, there are two buttons: 'Discard' and 'Save'.

Then I submitted the content ratings form, the screenshots for which are under number 18.
Then I filled out the target age and audience questionnaire:



Google Play Console

Unread notifications

Phytoplankton Air Systems

← All apps

Dashboard

Statistics

Publishing overview

Test and release

Monitor and improve

Reach and devices

Ratings and reviews

Android vitals

Policy and programs

Policy status

App content

Teacher Approved

← Dashboard

Target audience and content

Discard changes

Target age

Target age group

What are the target age groups of your app?

Based on your response we'll highlight any actions that you may need to take, and the policies you may need to comply with.

Selecting certain target age groups, such as users over the age of 18, may allow additional restrictions to your availability on Google Play.

Make sure you review the [Developer Policy Center](#) before publishing your app. Apps that don't comply with these policies may be removed from Google Play. [Learn more](#)

☐ 5 and under

☐ 6-8

☐ 9-12

☒ 13-15

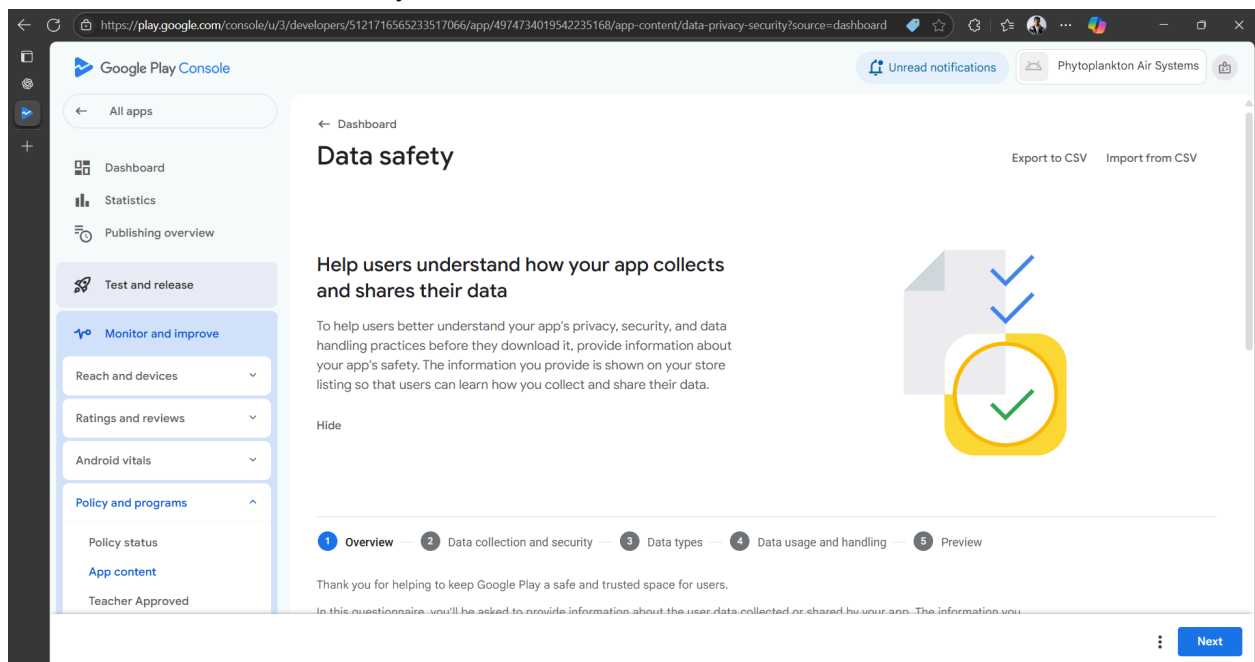
☒ 16-17

☒ 18 and over

Back

Next

Then I filled out the Data safety form:



Google Play Console

Unread notifications

Phytoplankton Air Systems

← All apps

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Policy and programs

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Teacher Approved

← Dashboard

Data safety

Export to CSV

Import from CSV

Help users understand how your app collects and shares their data

To help users better understand your app's privacy, security, and data handling practices before they download it, provide information about your app's safety. The information you provide is shown on your store listing so that users can learn how you collect and share their data.

Hide

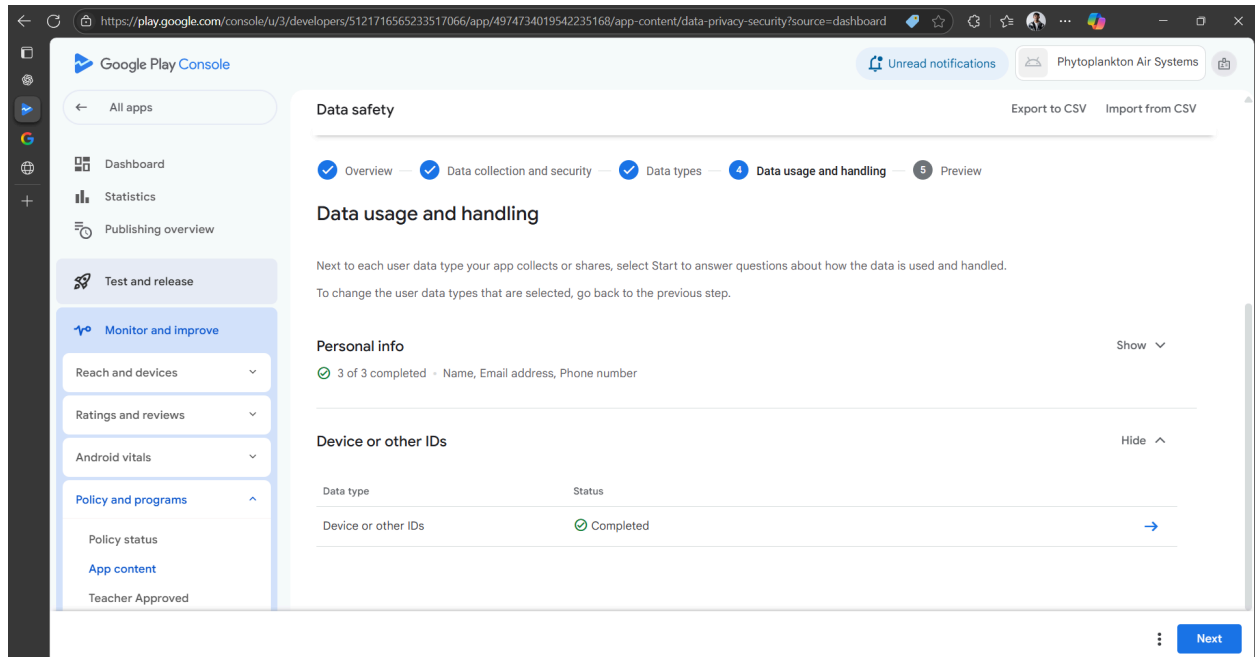
1 Overview — 2 Data collection and security — 3 Data types — 4 Data usage and handling — 5 Preview

Thank you for helping to keep Google Play a safe and trusted space for users.

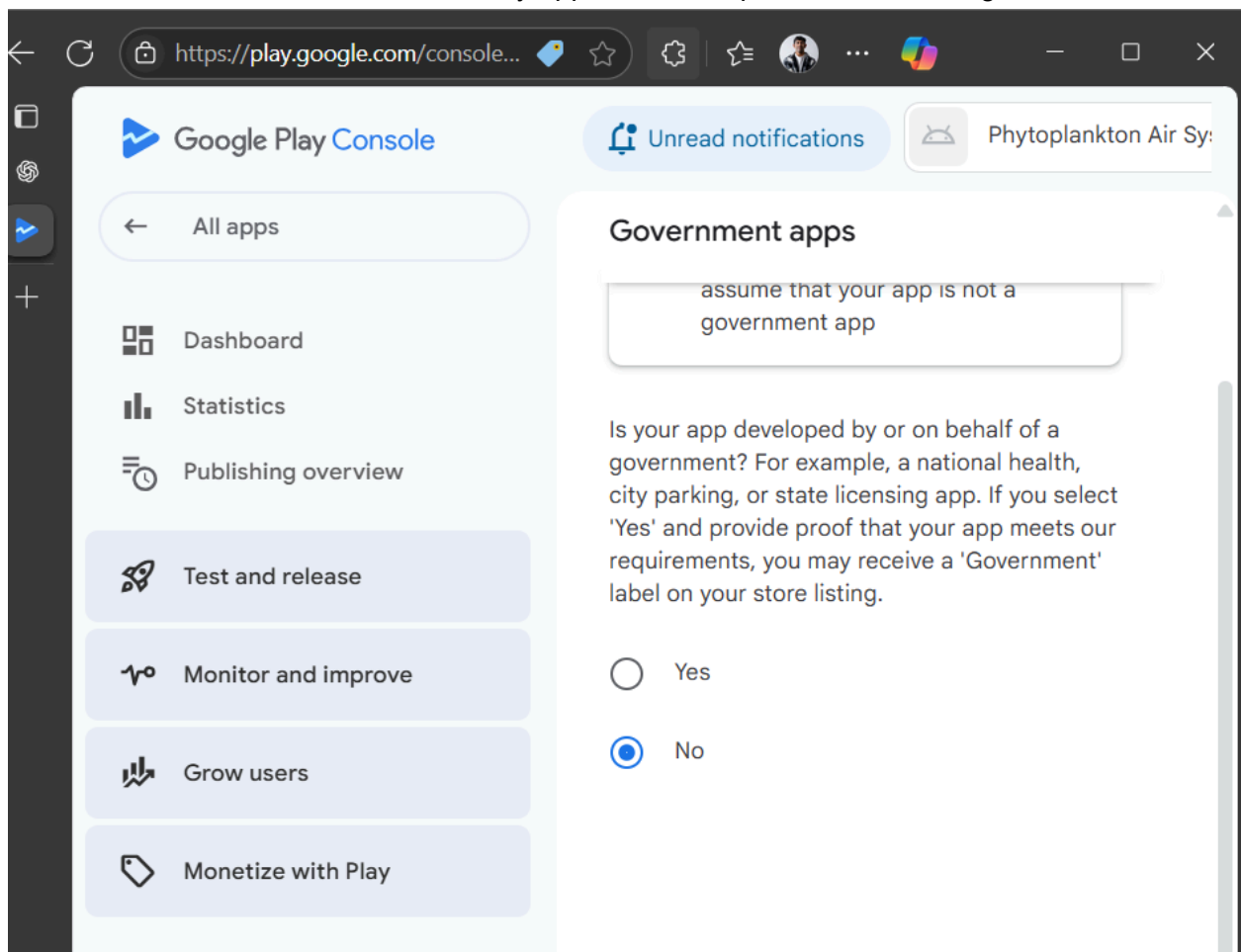
In this questionnaire, you'll be asked to provide information about the user data collected or shared by your app. The information you...

Next

And a questionnaire for how my app is using the data it's collecting:



Then I filled out a form about whether my app was developed on behalf of a government:



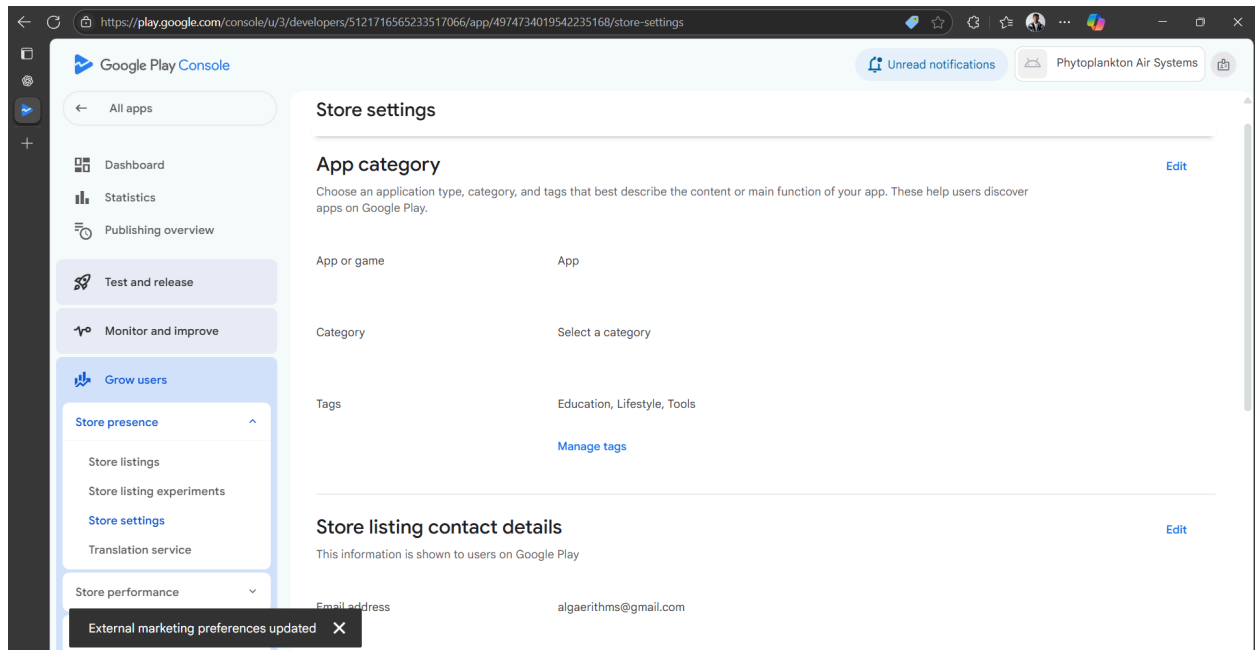
Then I filled out a form about Financial features in the app:

The screenshot shows the Google Play Console interface for the 'Phytoplankton Air Systems' app. The left sidebar contains navigation links: All apps, Dashboard, Statistics, Publishing overview, Test and release, Monitor and improve, Reach and devices, Ratings and reviews, Android vitals, Policy and programs, Policy status, App content, and Teacher Approved. The main content area is titled 'Financial features' and includes a progress indicator with two steps: 'Financial features in your app' (active) and 'Documentation'. Below the title is a section 'Financial features in your app' with the instruction: 'Select all of the financial features your app provides. This helps us to make sure the right teams review your submission.' Under the heading 'Banking and loans', there are several unchecked checkboxes: 'Personal loan direct lender', 'Loan facilitator', 'Payday loans', 'Banking', 'Line of credit', 'Earned wage advances', and 'Microfinance banking'. At the bottom right of the form are buttons for 'Discard', 'Back', 'Save as draft', and 'Next'.

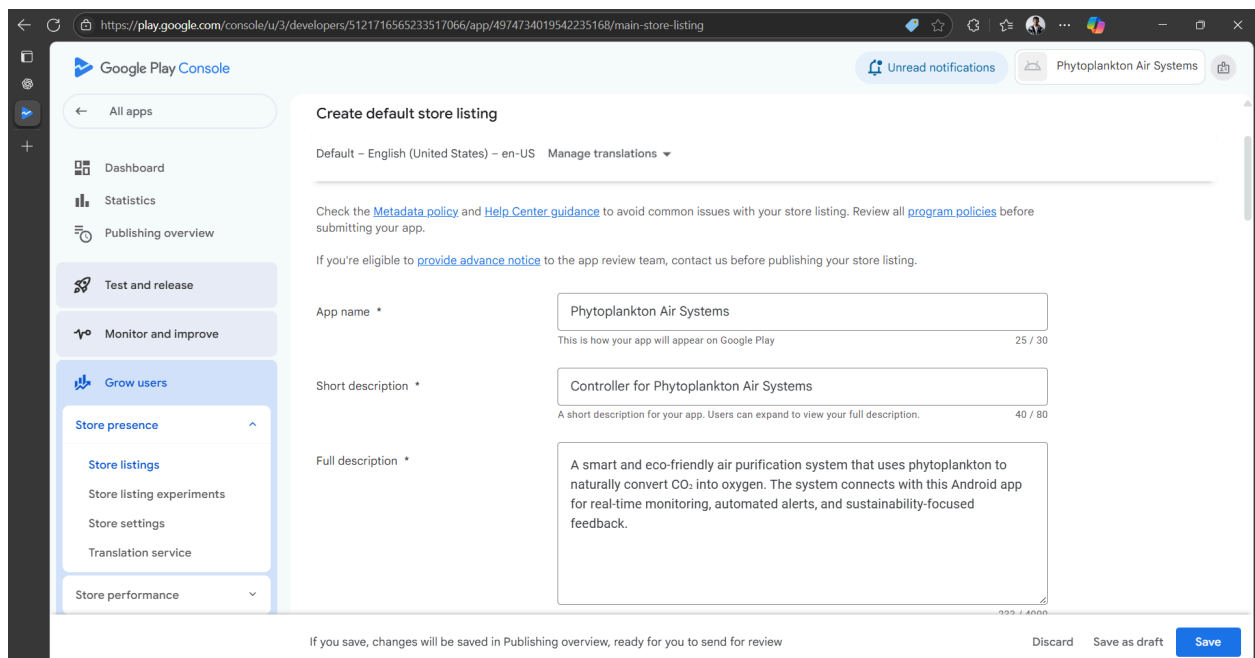
Then I filled out a form about whether my app is a Health app:

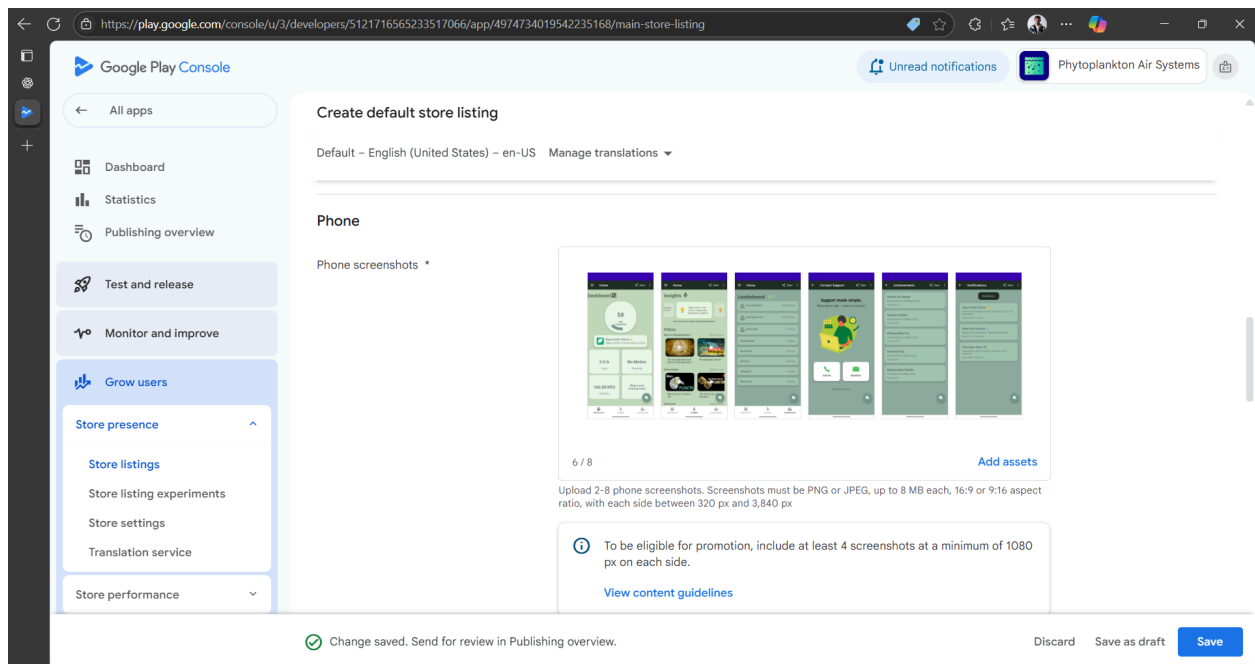
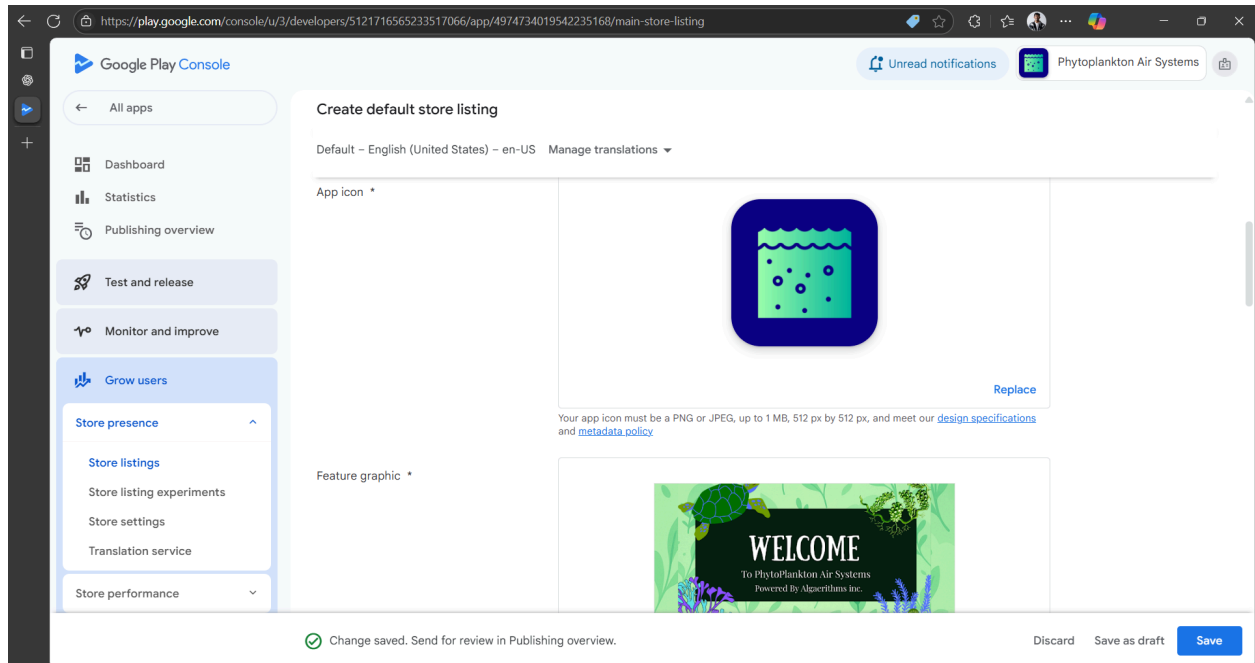
The screenshot shows the Google Play Console interface for the 'Phytoplankton Air Systems' app, specifically the 'Health apps' section. The left sidebar is identical to the previous screenshot. The main content area is titled 'Health apps' and contains several unchecked checkboxes: 'Physical therapy and rehabilitation', 'Reproductive and sexual health', and 'Research studies, clinical trials, and patient communities'. Below the third checkbox is a note: 'Apps leading research studies must check [Fit & Health Research](#) to see if you are in scope for additional requirements'. There is also an 'Other' section with an unchecked checkbox and a text input field. At the bottom, the 'My app does not have any health features' checkbox is checked. At the bottom right of the form are buttons for 'Discard' and 'Save'. A 'Loading...' status indicator is visible at the bottom left of the main content area.

Then I filled out a form about selecting an app category and providing contact details:



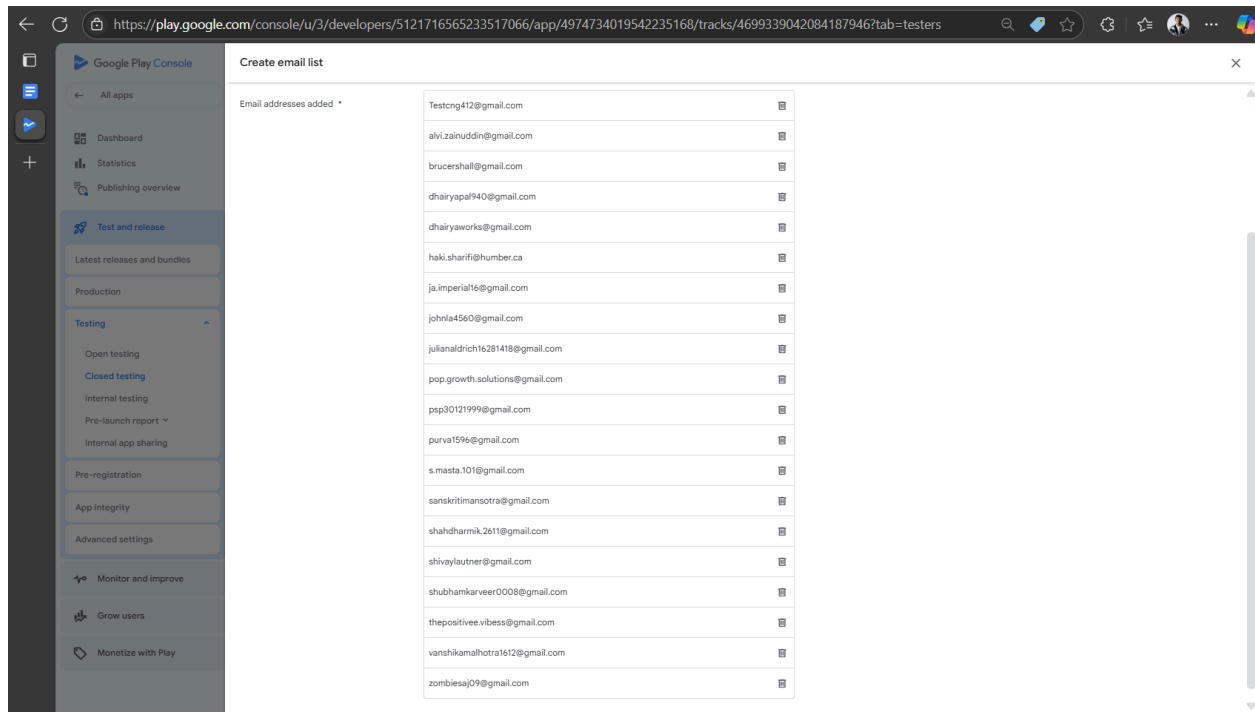
Then I filled out a form for selecting a store listing and uploading playstore icon and graphics and phone screenshots:
















After all these 11 steps, I moved to closed testing phase - there was another one called internal testing but that was optional so I directly moved to closed testing, inviting 20 users to test my app.

14 & 15. For closed testing of 20 testers, invite me using Testcng412@gmail.com and haki.sharifi@humber.ca. Take screenshot showing you have invited at least 20 testers, including the emails above.

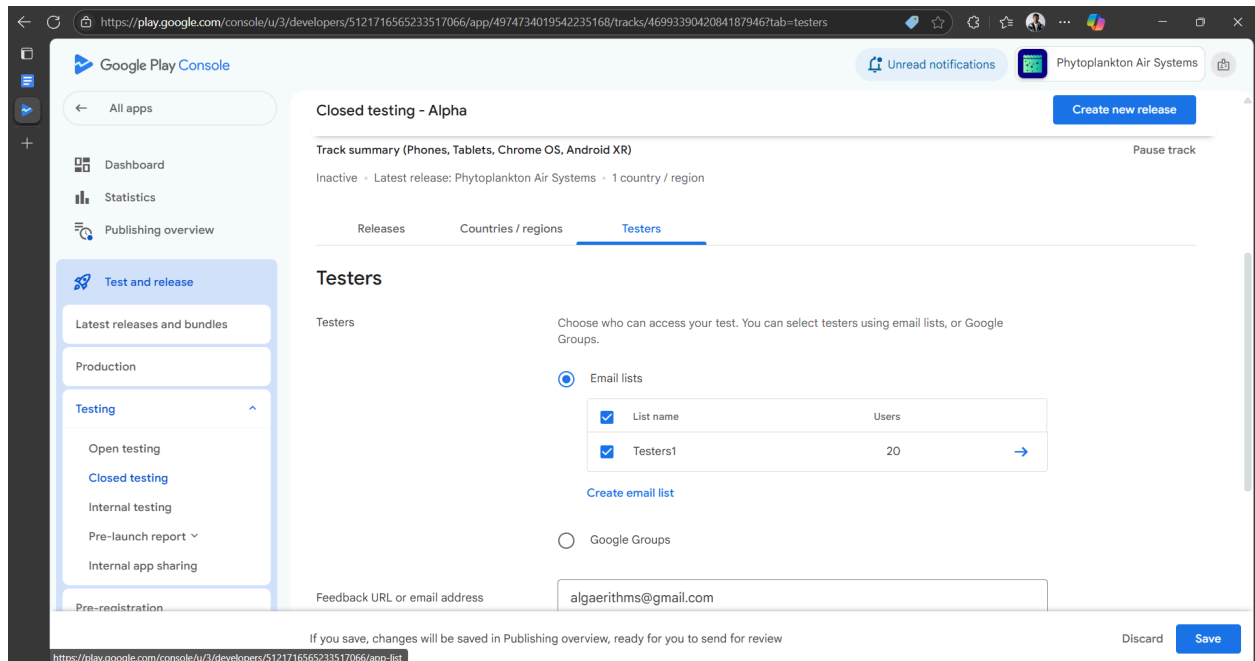


[Upload CSV file](#)

Email addresses added *	Testcng412@gmail.com	
	alvi.zainuddin@gmail.com	
	brucershall@gmail.com	
	dhairyapal940@gmail.com	
	dhairyaworks@gmail.com	
	 haki.sharifi@humber.ca	
	<div>This email address doesn't exist</div>	
	johnla4560@gmail.com	
	julianaldrich16281418@gmail.com	
	pop.growth.solutions@gmail.com	
	psp30121999@gmail.com	

 Your changes couldn't be saved

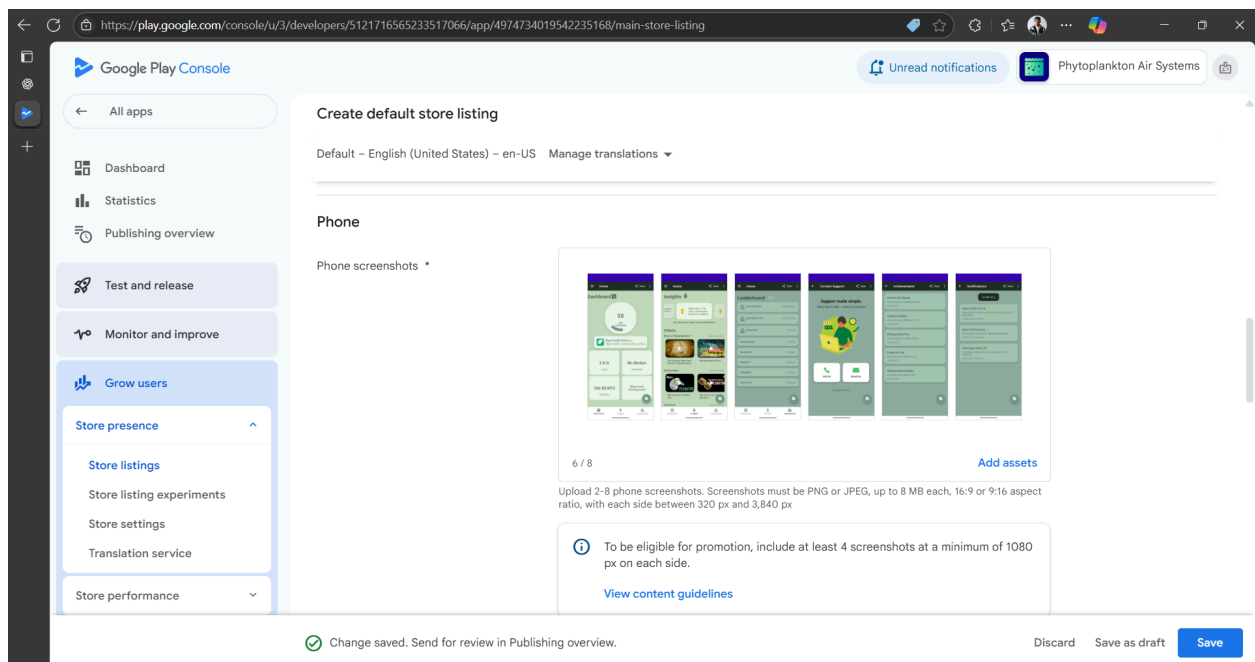
Couldn't invite haki.sharifi@humber.ca.



16. Take screenshot of minimum of 6 tester's feedback.

We have to wait 14 days to apply for production - before that all feedbacks are private and not shared with the developer.

17. Screenshot of the phone sample screens that were submitted.



18. Screenshot of the content ratings.

Google Play Console

Unread notifications

Phytoplankton Air Systems

All apps

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Statistics

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Teacher Approved

Content ratings

Discard changes

1 Category2 Questionnaire3 Summary

Category

Email address

algaerithms@gmail.com

This will be used to contact you about your content ratings. It may be shared with rating authorities and IARC.

Category

☐ Game

The app is a game or betting app. Examples include: Candy Crush Saga, Temple Run, Mario Kart, The Sims, Angry Birds, casino games, interactive visual novels, management games, or daily fantasy sports.

☐ Social or Communication

The primary purpose of this app is to meet or communicate with people. Examples include Facebook, Twitter, Skype, and SMS.

☒ All Other App Types

Any app that isn't a game, social networking app, or communication app. Examples include entertainment products, consumer stores, news apps, lifestyle apps, streaming services, utilities, tools, emoji sets, fitness apps, magazines, and customizations.

Terms and conditions

☒ I agree to the [Terms of Use](#) as outlined by the International Age Rating Coalition (IARC). Content ratings on Google Play are provided by the International Age Rating Coalition (IARC) and are designed to help developers communicate locally relevant content ratings to users.

Next

Dashboard

Content ratings

Discard changes

Category1 Questionnaire2 Summary

All Other App Types

Downloaded App

Completed

Does the app contain any ratings-relevant content (e.g., sex, violence, language) downloaded as part of the app package (code, assets)? [Learn more](#)

☐ Yes☒ No

User Content Sharing

Completed

Does the app natively allow users to interact or exchange content with other users through voice communication, text, or sharing images or audio? [Learn more](#)

☐ Yes☒ No

Online Content

Completed

Does the app feature or promote content that isn't part of the initial app download, but can be accessed from the app? Examples of this type of content are movies in the Netflix app, product listings in the Amazon Shopping app, songs in the Spotify app, generated AI content, or news articles in the New York Times app. [Learn more](#)

☒ Yes☐ No

Violence

Completed

Can the app contain violent material? Content that sellers create as part of the app catalog needs to be considered; however, this question does not refer to user-generated content (e.g., comments and reviews). [Learn more](#)

☐ Yes☒ No

Sexuality

Completed

Can the app contain sexual material or nudity (except in a natural or scientific setting)? Content that sellers create as part of the app catalog needs to be considered; however, this question does not refer to user-generated content (e.g., comments and reviews). [Learn more](#)

☐ Yes☒ No

Language

Completed

Can the app contain any potentially offensive language? Please note that this does not refer to user-generated content. [Learn more](#)

☐ Yes☒ No

Controlled Substance Completed

Can the app contain references to or depictions of illegal or recreational drugs? Content that sellers create as part of the app catalog needs to be considered; however, this question does not refer to user-generated content (e.g., comments and reviews). [Learn more](#)

☐ Yes ☒ No

Promotion or Sale of Age-Restricted Products or Activities Completed

Does the app focus on promoting or selling items or activities that are typically age-restricted such as cigarettes, alcohol, firearms, or gambling?

☐ Yes ☒ No

Miscellaneous Completed

Does the app share the user's current and precise physical location with other users? [Learn more](#)

☐ Yes ☒ No

Does the app allow users to purchase digital goods? [Learn more](#)

☐ Yes ☒ No

Does the app include cash rewards, gift cards, play-to-earn features, convertible cryptocurrency rewards, or the issuance of transferable digital assets (e.g., NFTs)?

☐ Yes ☒ No

Is the app a web browser or search engine? [Learn more](#)

☐ Yes ☒ No

Is the app primarily a news or educational product? [Learn more](#)

☐ Yes ☒ No

Google Play Console

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Phytoplankton Air Systems

← All apps

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Content ratings

Discard changes

✓ Category ✓ Questionnaire 3 Summary

Summary

Ratings shown below may differ from the ratings shown to users on Google Play.

- Google may reject your app or app update for misrepresentation of your app's content
- Google may use your questionnaire responses to generate ratings for specific territories as required by local law
- Rating authorities participating in IARC may change your app's rating after they review it

Google and IARC will share your contact information, questionnaire responses, ratings, developer support requests, and app details with rating authorities. [Learn more](#)

Category	All Other App Types
Online Content	App features or promotes online content

Your ratings

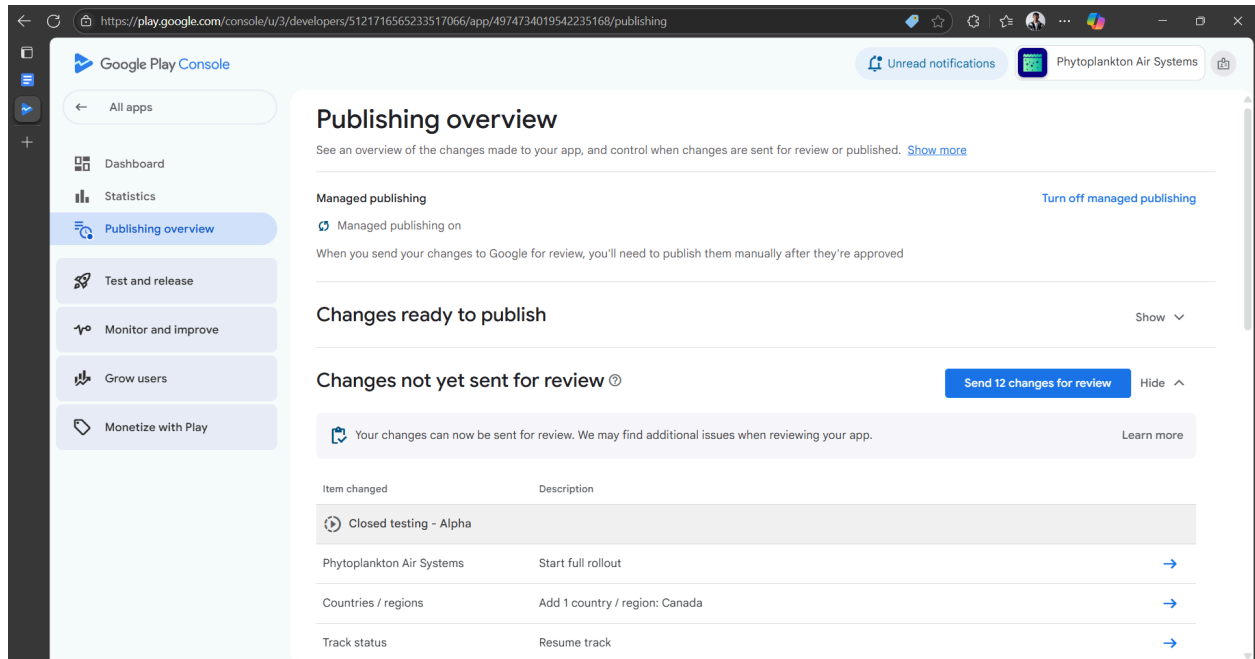
Result

✓ If you save, changes will be saved in Publishing overview, ready for you to send for review

Back Save

<https://play.google.com/console/u/3/developers/5121716565233517066/app/4974734019542235168/app-content/content-rating-iarc-questionnaire?source...>

19. Document the date when the app was initially submitted into Google Play.



Sent for publishing review on August 10, 2025 at 3:20 pm.

20. Document the date for subsequent submission, and why you had to resubmit.

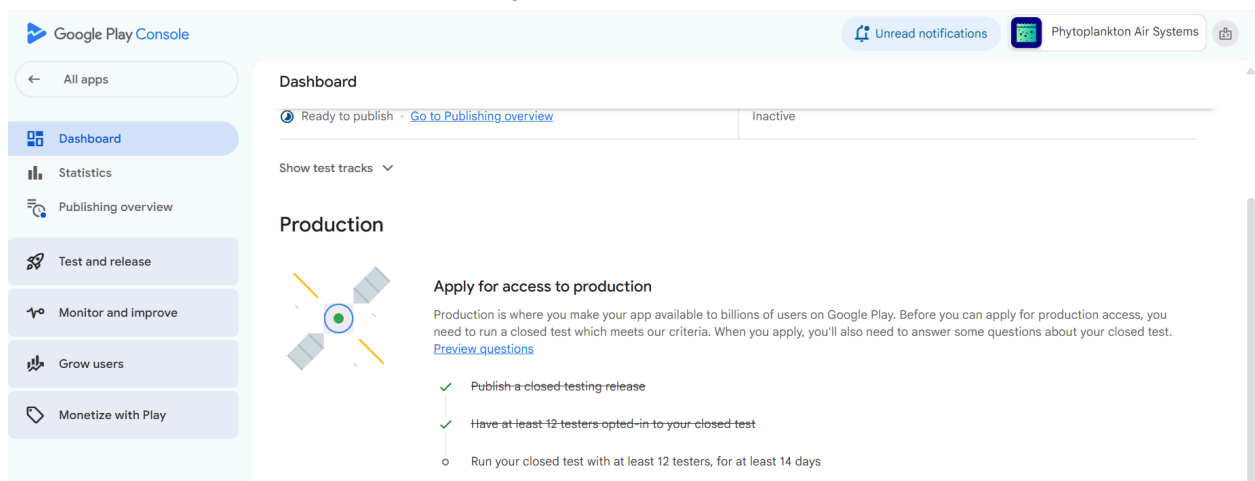
We didn't have to resubmit.

21. Document when the app was available for testers to download.

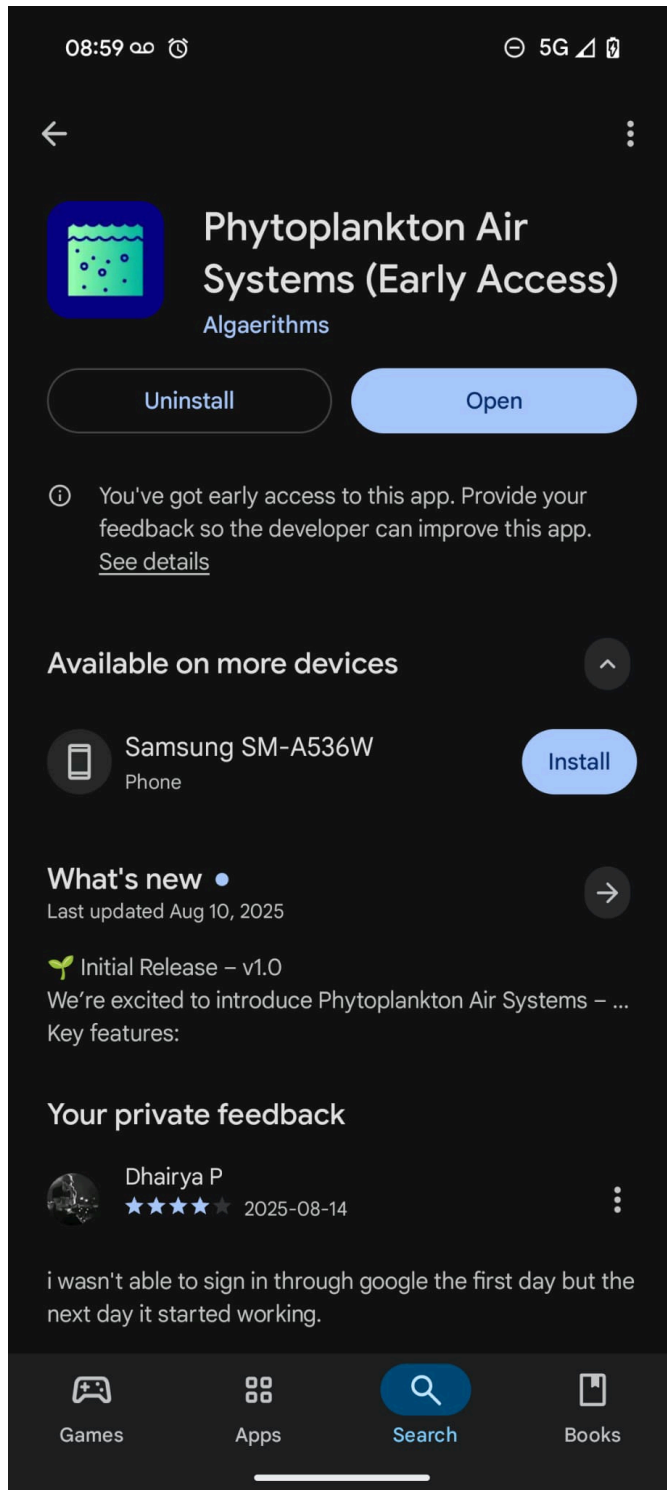
The next day, August 11, 2025, the app was ready to publish and very briefly after it was ready for testers to download.

22. Document when the app was finally available for external people to download.

The test has to be run within the closed testers for at least 14 days before it can be applied for production. We have all the testers, it's just about time now.



24. Provide screenshot of the App in Google play with the reviews.



25. Provide a link of the app in Google Play. (PLEASE USE testcng412@gmail.com)
<https://play.google.com/store/apps/details?id=ca.algaerithms.inc.it.phytoplanktonairsystems>

26. Provide screenshot of the reviews that are available on the developer portal.

Reviews are available only when the app is released in production, which we need to wait 14 days for.