

NFM: Precalculus README

By: John Huinil, Leonel Diaz-Gaytan

Cross Keys High School

Brookhaven, GA

Need For Math: Precalculus is an innovative app that projects on all devices. When a user enters in the app, the user has the option to either enter as a guest or create a new account. It is recommendable for the user to create an account as it helps save player progress within the system. Once they have successfully logged in, they are presented with the lobby screen and a welcome with the user's name beside it. On the bottom of the app, there are four icons that let the user access the settings, profile, gamemodes, and lessons.

Features Within NFM

- Accessible across all devices
- Users are able to send feedback and suggestions for any bugs for improvement
- Users are able to access lessons through the lessons page

User Tutorial:

- Problem statement: Many students struggle with understanding the lessons that are taught in Precalculus. Having an app that gamifies learning Precalculus will help students in improving their Precalculus skills.
- This is solved through a progress tracking game where the user can play a racing game where the user has to answer a question based on specific topics.
- This mobile application was developed through code.org. It is able to run across all devices.

- In order to use this application, you must either have the link to the app, or by downloading the zip with the link provided.

Websites and services Used:

- Code.org - <https://code.org>
 - The application was developed and tested through code.org, in both Game and App Lab.
- OpenAI - <https://openai.com/>
 - We used OpenAI in order to come up with ideas regarding the topic and structure of the application
- Canva - <https://www.canva.com/>
 - We used Canva in order to design the look of our application. It was also used in order to create our presentation.
- YouTube - <https://www.youtube.com/>
 - We used YouTube in order to compute data within our application, including the user's password, email, c username, and any feedback they provide.
- Flipped Math - <https://www.flippedmath.com/>
 - We used Flipped Math in order to make questions for the user to answer

References:

- 2024-25 Competitive Events Guidelines
<https://connect.fbla.org/headquarters/files/High%20School%20Competitive%20Events%20Resources/Individual%20Guidelines/Presentation%20Events/Mobile-Application-Development.pdf>

License (CC)

Need For Math: Precalculus Copyright Statement

Copyright © 2025 NFM: Precalculus

Permission is granted, for any person that acquires a copy of the application and anything associated with the "application", in order to use the application without any limitations. These actions include: modify, merge, distribute, and/or publish the application. Persons in use of the app must be subject to the conditions listed below.

1. The Copyright permission listed above must be in pair with all copies or sections within the application
2. Users are given the right to modify, merge, distribute, and/or publish their own version of the application.

By using this application, you agree to follow the terms and conditions set forth within this copyright statement

For any inquiries, please contact us at nfmprecalc@gmail.com