

A photograph of three young children, two girls and one boy, sitting at a table and working together on a math problem. They are all wearing white shirts. The girl on the left has a braid and is holding a yellow pencil. The boy in the middle is also holding a yellow pencil. The girl on the right is looking at the paper. The background shows other tables and chairs, suggesting a classroom or a meeting room. Overlaid on the image is a white circle with the text "orlando math circle" curved along its top and right edges, and "OMC" in large, bold, white letters in the center.

orlando math circle

OMC

About Us

- We are a network of students, educators, & STEM professionals that facilitate engaging math enrichment classes and events to local disadvantaged K-12 students
- We focus on logic activities that promote creative problem solving & critical thinking
 - Towers of Hanoi, infinite series, Wolves & Sheep, etc.
- OMC is the designated test center for major math competitions in Central FL

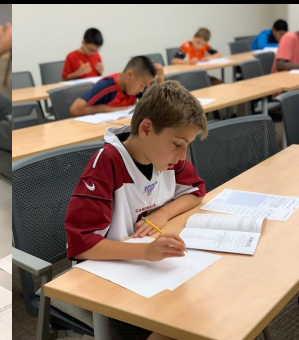
Check out this video: [Orlando Math Circle](#)



*Weekly community center classes
for elementary schoolers*



*American Math
Competition 8*



*Fractal lesson with Dr. Yana
Mohanty (UCSD)*



Orlando MakerFaire 2019

What We Need

Web app that offers a native app-like experience entirely through the browser.

Why We Need an App

Our current native app is unintuitive in some places; there is no way to fix this since the original developers made it closed source and have since relocated.

We would like to improve user experience for the app and have it be extensible so that we can continuously improve the app and allow our high school students to gain programming experience.

The app is to be used by parents, students aged 14-18, and adult volunteers to view and register for various events/classes throughout the year. There are generally no more than 30-40 users on the app concurrently and roughly 120 total users. There likely will not be more than 70 concurrent users.

Motivating Example

You can't actually register for an account on the app itself... it is a seven step process that must be done from a desktop.

Why Choose Us?

- OMC is a small, local organization that serves and impacts students in Central FL (with a focus on students that are low-income, female etc.). We are a grassroots nonprofit that has already changed lives.
- We have access to board members, parents, and STEM professionals that work in various industries who are willing to help
- There are UCF students at OMC who can easily meet with a Senior Design group throughout the year; communication will not be a hassle with us
- You will have easy access to all possible digital media assets

Improving our app will likely lead to higher turnout at our events and will alter the K-12 STEM landscape in Central Florida!! :^)

Detailed Requirements

- Calendar for users to see upcoming events and classes, and mark themselves as going (we use Google Calendar)
- Allow admin accounts to create and edit events on the calendar, and view who is going for each event
- Ability to create accounts of different types (Admins, parents, etc.)
 - Student profiles must be tied to an existing parent account; parent accounts can be tied to multiple children
 - Student profiles need to be COPPA compliant (a student under 13 must have a parent create their profile for them)
- Register/pay/sign photo release for events (we use PayPal)
- Parents should be able to upload files for admin verification (.PDF, .jpg, .png, .HEIC)
- Parent accounts should be able to be flagged by admin as “free/reduced lunch” and bypass registration fees
- Admins should be able to edit and create other account types
- Port over existing accounts (there are a little over 100)
- Volunteers must read/virtual sign Volunteer Handbook agreement (.PDF)

Stretch Goals

- Social media feed in the app to view facebook posts, tweets, etc (Facebook is the main priority)
- Push/email notifications
 - When an event is 2 weeks away
 - For events they registered going to 1 day before/1 hour before
- Loyalty points system where admins can assign point values to each event/class and allow students to gain levels or ranks. Have the ranks tied to mathematicians or math concepts :^)
- Loyalty points system where admins can assign point values to each event/class and allow volunteers to gain levels or ranks for recognition and hours.
- A framework for Admins to create math challenge questions that can be viewed and answered by users to gain points

Contact Us



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