

Student Name:
Benjamin O'Bryan

Grade: 12

Purpose of the contest:

The U.S. House of Representatives hosts a district-wide Congressional App Challenge for middle school and high school students, encouraging them to learn to code and inspiring them to pursue careers in computer science. Every year, they challenge students in our districts to create and submit their original apps for a chance to win the Congressional App Challenge (CAC). Each challenge is district-specific. As U.S. Representatives they publicly recognize their winning teams and each winning app may be put on display in the U.S. Capitol Building for one year.

How we got involved:

At the beginning of the school year I was contacted by Suzanne Miles, Congressman Guthrie's Field Representative, who had recently read an article about Apollo's success in unveiling our four year programming pathway - AHS Coding Pathway. She encouraged me to find a student who would compete. As an Apollo graduate herself, she really wanted us to have a chance to participate and hopefully win. Apparently our district is by far the most competitive in Kentucky. In most districts, less than 10 projects are submitted, but in our district this year there were 41!

Benjamin O'Bryan came immediately to mind as my "go to" student for fun and challenging projects. I pitched an idea to him about an app to create and the purpose for creating it. Not only would this be a great competition to be a part of but the app itself would help our school. He jumped on the idea with full force and began planning his design, doing research, and writing code.

What the app is:

Have you ever watched a professional sport where the coach on the sidelines calls in a number (usually 3 digits) and then all of the players look at their wrist to see what the coded message was? These wristband play sheets are made by programs - usually expensive ones that carry an initial cost and then a monthly cost. The plan was to develop our own in house app to be used to baseball, softball and football - the three most prominent sports that use sideline playcalling. Ben worked on this app asking questions as he went along on the best way to approach various aspects of the app until he succeeded in creating an app that allows coaches to generate their own unique set of plays. The coaches will now have the ability to enter any number of plays they want, at any frequency they want, with any color coding they want and the program will create a randomized table of play calls that fit in a player's wristband. Coach sheets are also generated so when they want to call a play they select any of the randomly generated three digit numbers to call out to their players. The players then look at the corresponding row and column to see what play their coach just called. These sheets can be generated for each and every game so no

opposing team will ever be able to crack the code. The best part of this though, is that we will be offering it to our coaches for free.

Final Thoughts:

This is our first time competing in the Congressional App Challenge and it was a fun challenge that I can give my elite students, like Ben, in the future. Next year, when our four year AHS Coding Pathway is in full swing and we have more and more elite students, I plan to submit even more apps to this challenge and others that I can find to showcase what Apollo is all about.

On Wed, Dec 11, 2019 at 6:07 AM Lora Wimsatt - CO

<lora.wimsatt@daviess.kyschools.us> wrote:

Hi Jonathan - Thank you for sharing this great news! I would love to work with you in getting some media coverage for Benjamin O'Bryan. Please provide a few more details for a press release:

Student name - Benjamin O'Bryan

Grade -

Please describe the goals and purpose of this contest -

I assume (?) Benjamin has designed some kind of app. Please provide more information about that. Is this a real, working model, or a prototype?

Explain why you believe participation in this contest/activity was important for Benjamin (and other students who may have participated), including how lessons learned through this experience may benefit students in the future.

Please provide contact information for yourself that I may share with reporters so they can reach you for more information and/or to schedule interviews with your student.

Anything else you think is important to be included.

Photograph of Benjamin - good-quality, high-resolution (large size) jpg - head & shoulders portrait

Thank you again! I will look forward to hearing from you! Congratulations to you AND your student!!!

Lora

On Tue, Dec 10, 2019 at 11:37 AM Jonathan Leohr - AHS

<jonathan.leohr@daviess.kyschools.us> wrote:

I wanted to share with you the amazing news of our student Benjamin O'Bryan whom I've been working with all year in competing for the Congressional App Challenge. I have just received word that Ben finished 3rd overall for our district which was by far the most competitive district in all of Kentucky. In our district, we had 41

submissions where most districts have less than 10 and Ben still ended up in the top 3.

We are currently working out a date for January where Congressman Brett Guthrie will be coming to Owensboro to present Ben with his certificate of achievement. As soon as I have a specific date I will be happy to share it with you so you have an opportunity to join me in congratulating Benjamin O'Bryan for his outstanding accomplishment!

See attached email conversation for more details.

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Jonathan Leohr

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