

Community Outreach: Prepare App Challenge and STEM Careers with App Inventor

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Abstract

The Verizon app challenge helps to motivate, inspire and prepare students for STEM careers. The community outreach initiative establishes mobile app training program with MIT app inventor to prepare students for the app challenge and STEM careers.

1. Verizon App Challenge

The Verizon app challenge was created to motivate, inspire and prepare students for STEM careers. It is a national competition for middle and high school students. In the competition, student teams design mobile apps that solve societal issues.

The app challenge 2013 has been a success for student teams: 8 best teams in Nation (BIN), 24 best teams in Region (BIR) and 81 best in State (BIS).

2. Verizon Community Outreach

Verizon Community Outreach is an initiative which allows Verizon employees to volunteer in the communities. This initiative has established partnerships with external schools and 501(c) 3 organizations to promote STEM as a career path. This initiative provides high school students mentoring and training in technology, leadership and literacy. So the initiative returns positive publicity in the communities which the company serves.

3. Mobile App Training in 2014

In the 2014, Verizon Employee Resource Group (ERG) in Irving, TX has teamed with Urban League Dallas to establish a pilot mobile app training program for high school students in South Dallas.

The Objectives:

- Help the students to have insights into STEM and prepare them for the STEM related activities.
- Help the students to grasp basic and reasonable skills in MIT app inventor.
- Guide students to have necessary skills to participate in the upcoming Verizon app challenge in fall 2014.

The Approach and Methods

- This pilot training program has been set up as an 8-week training program related to MIT app inventor. The training is carried out in computer lab in Urban League Dallas during the weekend.
- The program helps students to explore the world of mobile applications development utilizing the app inventor to design and test functionality on the emulator and android devices.
- The training introduces students to the basic and advanced programming concepts with MIT app inventor by examples which allow students to design, build and create small to mid-sized mobile applications
- The training introduces students the software development life cycle and guide students to take app from concept to reality.

The Results

- This training program is still on going and will continue until the middle of June.
- At the end of the 8 week course, students are expected to be able to demonstrate concepts learned in class to execute a fully functional, mobile app as a final class project

4. Conclusion

- The MIT app inventor has demonstrated the great significance in helping high school students to explore the world of mobile applications development.
- The app Inventor helps the students to grasp basic and advanced programming concepts in an effective and efficient manner
- The training with the app inventor will help students to participate in Verizon app challenge and prepare for their STEM carrier path.