VTHSPC Website

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Outline

- Overview
- New Website
- Testing
- Future Work
- Lessons Learned
- Acknowledgements / References
Overview - Problem

● Yearly high school coding competition
  ○ Contest is held online
  ○ Contains info of current and past contests
  ○ Website is dated and unappealing

● Tasked with creating new website
  ○ Contemporary design
  ○ Easy-to-update and maintain

Client: Dr. Godmar Back
Overview - Previous Website

Home Page

Contest Page
New Website

- Created with Docusaurus
- All webpages primarily written in Markdown (MDX)
- Built and runs on VT server
Virginia Tech High School Programming Contest

Since 2014, the Computer Science Department at Virginia Tech has been holding a online programming contest for high school students in Virginia (and beyond), held in December.

Learn
Through this fun and engaging event, you can learn and refine many different skills. Problem-solving, thinking ability, and programming skills are merely a few, and you can continue to use these skills in the real-world.

Compete
With schools around the country participating in this contest, there is plenty of competition. Participants need to skillfully craft their solutions as quickly as possible, completing as many problems as they can within a certain timeframe.

Share
Please share this event with your friends and colleagues at other schools! This event is open to all high schools in the United States and possibly beyond, although we hope to particularly attract schools from the MidAtlantic region.
New Website - Contest Description

Contest Description

Organization

After our successful HS Programming Contests held in 2014, 2015, 2016, 2017, 2018, 2019, 2020, and 2021, we are excited to invite to this year’s contest. As in past years, this contest will be held online. Anyone enrolled in a high school is eligible to participate however, you will need a teacher (or parent volunteer) functioning as the official team coach or sponsor. Please see below for details of the rules.

Please share this event with your friends and colleagues at other schools! Capacity permitting, this event is open to all high schools in the United States and possibly beyond, although we hope to particularly attract schools from the MidAtlantic region.

Format Update

Based on the feedback we have received from coaches and contestants, we will hold this year’s contest using the traditional format of an ICPC contest, with teams of (up to) 3 students sharing a computer to solve as many problems as possible within 5 hours. We will ask that each team provide us with the contact information of a
New Website - Past Contests

Virginia Tech High School Programming Contest

Since 2014, the Computer Science Department at Virginia Tech has been holding an annual programming contest for high school students in Virginia (and beyond). The contest is held in December. The contest is in the style of the ICPC contests and is open to all teams of high school students who have an advisor or parent volunteer who is willing to function as a coach.
New Website - FAQ Page

Frequently Asked Questions

I can’t log onto this site
This site (cpc.cs.vt.edu) is not the site where the contest is taking place. Go to this URL: vt3scontest.cs.cold.run.clug.edu (Does not open until Friday Dec 9, 2022).

Why is the start time at noon this year?
This is to accommodate teams on the West Coast.

Will there be a designated lunch time?
No - we have no way of stopping the contest and restarting it. Teams are encouraged to have lunch on their own.

What if my school does not sponsor the contest this year?
We really appreciate teachers putting in the extra effort and time that is required to work with teams and to participate on a Saturday (and so should you!), but if for whatever reason no teacher is available, find another parent sponsor or coach that is not part of your team. This person would be the person to function as a contact point and they would be trusted with ensuring that your team follows the rules, particularly the limitation to one computer per team and not seeking human help.

Can I participate if I’m not enrolled in a high school?
Testing

- Most of our testing was on the front end design and SEO
  - These were tested mainly two ways: survey feedback and PageSpeed
- Other requirements like ease of update were simple to test using the time command when starting up the website
Testing: Survey Feedback

- We sent out a survey to the class to test out our website and give us feedback on it.
- This was a great way to see if our design was effective.
- Overall our feedback was mostly positive.
Testing: PageSpeed

- PageSpeed is a tool by Google that rates a website’s performance, accessibility, best practices, and SEO
- Easy to see how we were doing and what we needed work on
- Overall had great results that made our client and us happy
Future Work

- Future work would be on the stretch goals we were unable to complete
  - User profiles
  - Dynamic content
    - maintaining profiles and signing up for contests every year
  - Keeping track of statistics for each contest
Lessons Learned - Time Management

February
- Presentation 1
  Complete, full plan of project
  2/14

March
- Presentation 2
  Websites pages complete/considerable progress
  3/15

April
- Tests ran on website, working towards stretch goals
  4/15

Progress
- 2/28
  Website in first stages
  Interim Report in progress
- 3/31
  Front-end for website is completed
- 4/30
  Project completed
  Website running and available
Lessons Learned - Setbacks

- Version 1 would not meet requirements
- Switched approach, restarted project one month in
Acknowledgements:

- Dr. Godmar Back
- Dr. Edward Fox and TAs

References:

- https://icpc.cs.vt.edu/#/hscontest
- https://balsamiq.com/
- https://getbootstrap.com/docs/5.3
- https://docusaurus.io/
- https://vthspc.cs.vt.edu/