

## Computer Programming Students Present Virtual Presentations to Local Industry Partners

Computer Programming students at Augusta Technical College made virtual presentations to Georgia Iron Works, Rural Sourcing, Grunt Games, Columbia County, Kimberly Clark, Parsons, National Wild Turkey Federation and Kaichi, under the direction of their instructor, Mr. Prescott Lerch.

Here's how it works: Before each semester, Mr. Lerch solicits local business/industry partners to submit a database-centric application that the business needs. At that time, they become the product owner.

A team from the class is assigned to each business client. This semester, the program had 11 students, split into four teams. In Computer Programming, students learn about the Agile methodology for project development. A Scrum Master is selected, and the Scrum Master coordinates the team and liaisons with the product owner.

Teams are not aware of what technology will be needed for their project, nor are they aware of the skills of fellow team members. Projects ranged from DBMS from Sequel Lite, to Sequel Server, to the Cloud, from Relational to NoSQL. Technology from web pages ranged from Raspberry PI, Mobile devices to Python, Angular, Xamerin, C#, and PHP.

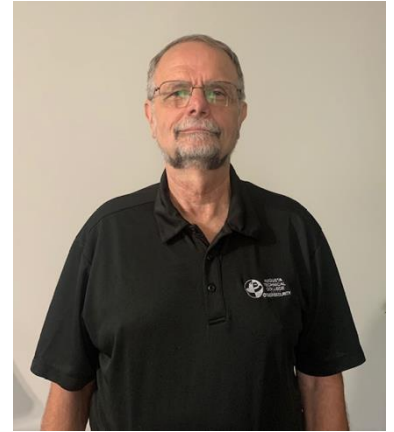
After completing projects, each team makes a 10-20 minute presentation to their industry partners and others in the audience. Spring semester projects were specifically geared towards Grunt Games, Georgia Iron Works, Rural Sourcing, and Columbia County.

For Grunt Games, a veteran-owned game design studio in Grovetown, the student team developed a Doctors Quest therapy for mental disabilities. Psychiatrists deal with a wide range of disorders, and this project gave therapeutic solutions. Doctors would interview patients developing a "Quest" to assist the patient to overcome disorders. The quest could be visiting several locations throughout the community, and performing activities. The patient would use a cell phone to be directed to locations designated by the Doctor (Google Maps), bring up their Quests, and then perform activities. Activities would be photographed, sent, and the Doctor would immediately observe the success since the database is stored in the cloud.

Georgia Iron Works (GIW), a pump manufacturer also located in Grovetown, requested a user-friendly mobile app for the GIW sales force to use at conventions, to display products to potential customers, while also recording customer data. Data would be housed in the Sequel Server Database at GIW main office, so future contacts could be made.

Rural Sourcing, Inc. (RSI), a nationwide technology firm headquartered in Atlanta with offices in Augusta, requested a Human Resources application to enable the company to know how best utilize talent. The app would keep track of talent within the RSI organization across the nation, skillset of each employee, and the skillset needs for projects nationally. This will be housed in a shared MySQL database to match employees to projects.

Columbia County requested a mobile mapping system. A Raspberry PI would be mounted on a vehicle to go through property areas within the county, taking rapid images and tagging with Geo-Locations. This would be used make 3D images of the property.



Usually, these student presentations are conducted in-person; however, these students had to adapt very quickly to the virtual world due to COVID-19. Yet, they all still managed to complete their projects and successfully deliver professional virtual presentations to 36 attendees.

Augusta Technical College Programming students used skills learned the classroom to create a great deliverable to satisfy the need of a business or industry. Congratulations!