

# Delmarva Digital

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# Company Background

- The company builds and hosts professional custom websites for various branches of business.
- Client's range from small business to entities over \$4 Billion in size.
- Services offered include
  - Website development
  - Hosting and maintenance
  - Technology consulting for startups and mature companies
- Based in Laurel, Delaware
- Over two decades of industry experience (founded before google)
- Founded by Alan Cole, and Tim Smith
- Dev team is small scale, but efficient



# My Responsibilities

## Development Work

- Built example apps in ColdFusion and Angular (e.g., Reddit Clone) during onboarding
- Contributed to DE Money School and Alliance Elevator Solutions projects

## Key Tasks

- Enabled class registration for users/guests via home page dialog
- Improved home page UI: styling fixes, sorting, and back-end data formatting
- Updated add package functionality by manipulating session storage
- Debugged and fixed editing flow for fixture categories during finalization
- Adjusted user limits in a review component (e.g., increasing wire length selection)
- Designed page flow logic using pseudocode and identified required component changes

## Tech & Tools Used

- Angular, ColdFusion, Git, TypeScript, Session Storage, Observer Pattern



# Difficulties Faced

## Steep Learning Curve

- Delved head first into legacy code bases without any documentation included.
- Navigated new projects without direct onboarding

## Magic Numbers & Hidden Logic

- Encountered hard coded values (IDs, constants) that complicated debugging
- Took extra time tracing through file paths and understanding category relationships

## Debugging Difficulties

- Resolved data reset issue by adjusting class retrieval logic in Angular; fixed improper loading of all classes instead of current user's.
- Fixed UI, and back-end sync issues through trial-and-error tracing.

## Time Management

- Balancing onboarding, debugging, and deliverables in 2-week sprints

```
addCar(): void {  
  if (this.filter.numCars === 1) {  
    this.filter.addCar();  
    this.elevatorService.updateFilter(this.filter);  
  }  
}
```

```
continue(answer: string): void {  
  this.selected = answer;  
  if(answer === "Y" && this.filter.numCars === 2) {  
    this.mirroredCar.emit(true);  
  } else {  
    this.showAnswerModal()  
    this.mirroredCar.emit(false);  
  }  
  this.scroll.emit({element: this.elementRef})  
}
```

```
<!-- Add code to return the instructor names for the courses -->  
<cfloop array="#data.items#" index="i" item="c">  
  <cfquery name="getInstructors" datasource="#request.dsn#">  
    SELECT DISTINCT CONCAT(u.fname, ' ', u.lname) as instructor, u.rowid  
    FROM course_instructor ci  
    JOIN user u ON u.rowid = ci.instructor_id  
    WHERE u.role = 'Instructor' AND  
           ci.course_id = <cfqueryparam cfsqltype="cf_sql_integer" value="#c.rowid#">  
  </cfquery>  
  <cfset c.instructors = queryToArray(getInstructors)>  
</cfloop>  
  
<cfreturn createMyReturn(data,true,'Loaded items successfully') />
```

```
"58": [50,51], // 50, 51, 53  
"50": [58,51,53],  
"51": [58,50,53],
```

# Connections to Classroom

## CoSc 330 – GUI & OOP Design Patterns

- Applied **MVC architecture** and related design patterns in real-world projects
- Experience building *NordicCal* from scratch deepened my understanding of full-stack software flow
- Gained practical exposure to managing both front-end and back-end responsibilities

## CoSc 425 – Capstone Project

- Learned how to integrate and debug code collaboratively within a shared codebase
- Strengthened my ability to **self-teach** new frameworks and APIs under pressure
- Adapted quickly to new tech stacks and contributed effectively to team workflows



# What I Learned

## Technical Growth

- Strengthened my ability to read, understand, and contribute to unfamiliar codebases
- Improved my skills in Angular, ColdFusion, and working with Git across multiple projects
- Learned how to trace bugs across front-end and back-end systems

## Professional Development

- Adapted to real-world development environments with minimal guidance
- Communicated effectively with supervisors and teammates to clarify goals and unblock progress
- Learned to manage my time across long-running tasks and shifting project demands

## Personal Takeaways

- Confidence in my ability to teach myself new technologies quickly
- Realized how important clean code and proper documentation are in collaborative projects
- Saw firsthand how even small changes can affect large systems, and learned to debug with patience

This internship taught me that writing code is only part of the job – understanding it is the hard part.

