

## A Tale of Three CS373 Students

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Roles:

- Narrator
- Student 0, aka Null.
- Student 1, aka Einar
- Student 2, aka Dux

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Narrator: Welcome to a glimpse into the future of three CS373 students. Let's take a look at how each student—poised to depart the sheltered life of college in the near future—fares in the capstone course of the Computer Science major.

Null: Hi, I'm Student 0, but my friends call me Null. You can call me Null, 'cuz you're my friends, right?

Dux: I am Student 2, or Dux. I am pleased to meet you.

Einar: Student 1, Einar. Glad to know you.

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Narrator: AFTER THE SECOND DAY OF CLASS

Narrator: CS373 students have just completed two 373 classes. Let's see what they have to say.

Null: I heard this was a tough course, but I don't get it. There are really only a few assignments, and the last one is just gluing three of them together. This will be easy. Time for some League of Legends!

Dux: DH said we should start finding our resources right away, but I'm going to pick an easy topic. Maybe I'll just do the same project I did for databases last semester. Yeah, that's a good idea!

Narrator: No, it's not.

Dux: Oh, OK. Then I'll do 3D gaming!

Einar: I'm heading to the library. I want to find a topic that lines up with my job interests, probably something in data analysis, maybe something in graph theory. Also, I better get my second set of article reviews done. DH said they are worth half a grade difference by the end. Even more important, I have to get in the habit of keeping up in the field. A lot of what I know now will be obsolete in five years.

Dux: I suppose I should get started on my article reviews. I think I was supposed to turn something in last time. Oh well, I am sure I can make up a bunch of them at the end of the semester.

Narrator: No, you can't.

Dux: Oh, OK.

Null: What article reviews?

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Narrator: TWO DAYS BEFORE THE PRELIMINARY STATE OF THE FIELD PAPER AND PRESENTATION

Null: Wow, that first 373 paper is due in two days. I think I have to give a talk too. Let's see.

Dux: I have been working on the PSOTF, but wow am I having trouble finding material. You would think there is a lot of information on 3D gaming. But Google just gives me fluffy stuff!

Einar: Graphs, edges, nodes, clusters. This is heavy stuff, but I am glad I got some help at the library. This PhD thesis is really useful. Goes through all the basic information. I am going to have trouble fitting everything into this short assignment and talk, but let's focus on the basics.

Null: Oh, fork! Both a paper and a talk in two days? Ugh. But I can do this, just like all the other times. What should I do for a topic? Oh, yeah, I told Heroux I was going to AI. He said that's OK. How about AI in League of Legends? Yeah!

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Narrator: PSOTF DAY. Students have completed their breadth-first paper on their research topic and are getting ready to give a talk. They are also a bit nervous because their paper will be read by several faculty members.

Einar: OK, I got it down to 10 slides and practiced. I should be done in 10 minutes. The paper's long, but that's OK.

Dux: I should be OK. My paper is pretty fluffy, to use Heroux's "technical term". I hope the CS faculty readers won't notice. Maybe I should cut and paste some text from the Oculus website. It sounds deep, even though I don't know what all the words mean.

Null: Well, I've got three pages of text, if I use double space and put some filler words in. I suppose I better add a bibliography. How do I cite League of Legends website?

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Narrator: ONE MONTH INTO THE SEMESTER

Einar: It's been challenging so far. I have learned a lot about graphs, and even eigenvalues. Dr. Bob in Math sure was helpful. As soon as I get that book from inter-library loan, I should have most of my references. Oh, I should get my article reviews submitted. That YouTube clip on the D-Wave quantum computer sure was interesting. I wonder if quantum computing will ever be real in my lifetime?

Dux: I have sure struggled finding references for my topic. DH said we should go to the library, but I haven't been in there since first semester freshman year. Why start now? I'll just do some more Google searching. I have to get some article reviews in too. Missed the last few.

Null: Wow, 373 sure is easy. Only one paper and talk so far. It didn't go so well, but I'll work it out. DH seems like he is easy going. Time for some DOTA!

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Narrator: TWO DAYS BEFORE THE TECHNICAL ANALYSIS PAPER AND PRESENTATION

Null: Fork! I am way behind in this course. How am I supposed to write this long paper? I still haven't figured out how to use LaTeX, so I'll just write in MS Word, and copy and paste it. I haven't found anything on how AI is done in League of Legends. It's almost like they don't want people to know how they do it! I think I have another assignment due too, but I don't remember what Heroux said. Here's the email. He always signs his emails with DH. I'm sure the D stands for dull.

Dux: I have been working like crazy the last week, but I am finally catching up in 373. Turns out 3D gaming is way too hard, but I was able to focus on the fundamentals of ray tracing. I think I get the basics now. It's actually very interesting. It won't be my best talk, but I should be OK.

Einar: I am really enjoying graph algorithms. I had no idea we could learn so much from studying relationships. It's a little scary. It's cool that so many companies are using graph analysis to understand their business better. I hope I can use my experience to get a good job. Or maybe I should consider grad school?

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Narrator: 3 WEEKS BEFORE FINALS

Einar: I thought 373 was going to be hard, but it really wasn't. I learned a lot about graph algorithms, which should help me find a good job. Even more important, I learned how to learn on my own. The last few weeks should be easy. I just have to synthesize my previous papers and talks and add some things I have learned recently.

Dux: I think I am going to make it through 373. But I sure wish I had started sooner. I have to basically redo my survey paper content.

Null: I am in trouble. Flagging 373. (thoughtful pause) I know! I was planning to move to Seattle next summer to get into the gaming field. I bet I can take this course out there!

Narrator: No you can't.

Null: I can't?

Narrator: No.

Null: Are you sure?

Narrator: Yes.

Null: Can I get an incomplete?

Narrator: Maybe, but unlikely.

Null: Do I have to take 373 again?

Narrator: Probably.

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Narrator: END OF SEMESTER

Null: Back again next semester. Ugh.

Dux: I made it. Even got a B. I really enjoyed learning about ray tracing. I also really enjoyed learning LaTeX. Very cool.

Einar: I am really happy I learned so much about graph analytics. I am also really glad I learned so much about other topics through my article reviews. I had no idea how interconnected computing is with the rest of the world. I am so excited that I am graduating with a CS major!