Teaching Internationalization

Internationally

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1 July 2013
Why Teach Internationalization?

A simple example

USA: July 1, 2013
Europe: 1 July 2013
Why Teach Internationalization?

A simple example

**USA:** July 1, 2013
**Europe:** 1 July 2013

**USA:** 7.1.2013 or 7/1/2013
**Europe:** 1.7.2013 or 1/7/2013
Why Teach Internationalization?

A simple example

USA: July 1, 2013
Europe: 1 July 2013

USA: 7.1.2013 or 7/1/2013
Europe: 1.7.2013 or 1/7/2013

ISO8601: 2013–07–01

but not: 2013–7–1
Why Teach Internationalization?

Other Concerns

- Spelling: colour vs. color, theatre vs. theater
- Units of Measure: meters vs. feet
- Forms of Address: PhD vs. dr, Mr./Ms. vs. p.
- Word Ambiguities: dinner vs. lunch
- Translation Problems: particularly idioms
- Local Customs: driving on the left or right
- Symbols: ☹️👍❓≠ ✔️❌

Why Teach Internationalization?
Importance to Software Development

- the ubiquity of the web
- the universality of the browser
- the common need for translation
- the emergence of international software development teams
- in short, the “global village”
Assignment:

JSON-Driven Web Pages
This course focuses on the concepts and algorithms that underlie the development of modern interactive three-dimensional computer graphics software. Good computer graphics requires effective use of data structures, human factors, algorithms, software engineering, and mathematics. This highly interdisciplinary nature of computer graphics is a fundamental guiding philosophy of the course. In addition to exams and quizzes, the course requires a substantial amount of programming, and assignments that require you to read current computer graphics research literature and write about it.

### Topics Covered

- Graphics Systems and Models
- Graphics Programming
- OpenGL API
- Viewing Concepts
- Input and Interaction
- Geometric Objects and Transformations
- Classical and Computer Viewing
- Projections
- Shading: Light and Matter
- Discrete Techniques: Buffers
- Implementation of a Renderer
- Hierarchical and Object Oriented Modeling
- Curves and Surfaces
- Procedural Methods
- Visualization

### Assignments & Grading

- Three programming/project assignments (30%)
DTSI UI1: Tworzenie systemów Informatycznych
Prof. Krzysztof Jassem

Celem zajęć jest zapoznanie z technologiami tworzenia systemów informatycznych. Studenci poznać narzędzia wspomagające analizę, modelowanie, harmonogramowanie i testowanie systemów informatycznych. Jako ze słuchaczami przedmiotu są studenci ostatniego roku studiów, celem kształcenia jest również przygotowanie do pracy w warunkach rynkowych. Podczas laboratoriów symulowane jest środowisko pracy nad systemem informatycznym: kreowane są warunki pracy nad systemem przeznaczonym do wdrożenia. Sporo uwagi na wykładzie poswięcone jest zagadnieniom pracy zespołowej i interakcji między jej członkami.

Tematyka kursu

- Wybrane aspekty pracy zespołowej w tworzeniu systemu informatycznego
- Aspekty 'miękkie' w zarządzaniu projektem informatycznym
- Czynniki sukcesu przedsięwzięcia informatycznego
- Metodyki zwinne w tworzeniu oprogramowania
- Planowanie przebiegu prac nad tworzeniem systemu informatycznego: biznes plan i harmonogram
- Zakres systemu informatycznego
- Przypadki użycia
- Modelowanie systemu informatycznego
- Projektowanie systemu informatycznego
- Testowanie aplikacji
- Użyteczność aplikacji
- Interfejs użytkownika
- Integracja ciągła
Assignment:
Backend Code
var root = {
    "title": "Computer Graphics I",
    "instructor": "Georges Grinstein",
    "instructorURL": "http://www.uml.edu/Sciences/computer-science/faculty/grinstein-georges.aspx",
    "coursenum": "91.427",
    "prereqs": "91.201 Computing III",
    "credits": "3",
    "description": "This course focuses on the concepts and algorithms that underlie modern, interactive three-dimensional computer graphics software. ...",
    "textbook": {
        "title": "Interactive Computer Graphics: A Top-Down Approach with Shader-Based OpenGL",
        "edition": "6th",
        "author": "Edward Angel, Dave Shreiner",
        "isbn": "9780132545235"
    }
};
var root = {
    "title": "Tworzenie systemow Informatycznych",
    "instructor": "Prof. Krzysztof Jassem",
    "coursenum": "DTSI UI1",
    "prereqs": "None",
    "credits": "4",
    "description": "Celem zajec jest zapoznanie z technologiami tworzenia systemow informatycznych. Studenci poznaja narzędzia wspomagajace analize, modelowanie, harmonogramowanie i testowanie systemow informatycznych. ... ",
    "textbook": {
        "title": "Analiza i projektowanie systemow informatycznych",
        "edition": "1st",
        "author": "Jacek Plodzien, Ewa Steposz",
        "isbn": "not known"
    }
};
Follow-Up: Live Interaction
Lecture at 4:00 AM EST
Follow-Up: Live Interaction
Class at 8:00 AM EST
Follow-Up: Live Interaction
Class at 8:00 AM EST
Daniel: Zapraszam Cię na hangout.  
Join hangout  
Sent at 8:31 AM on Wednesday

Daniel: Zapraszam Cię na hangout.  
Join hangout  
Sent at 8:37 AM on Wednesday

me: so the json file is here:  
http://weblab.cs.uml.edu/~ley/json/a4_content.json  
you edit it and send it back to me, and I will put it on the site.

Manuel: Okey  
Thank you ☺  
we start to do it right now
Representative Chat #1

P: I’m so happy that we can talk.
A: Yes, me too. It looks like everything worked great!

P: Yes, but there are not Polish characters. You should change for UTF-8.
A: The page is set up for that — I think it’s a problem with the web server.

P: No, we will send you again.
A: Could you try saving the file with Unicode encoding?

P: We’ve made mistake. Now it will be better.
A: Great. All of the characters display correctly now — I think they saved it as you said, using UTF-8.

P: It’s okay, awesome. We have to go now — next lecture is going right now. So, we will talk to you later.
A: Ok, it was good talking to you!
Representative Chat #2

P: We have just sent you a JSON file from [name suppressed] email. Could you check if it works?

A: Oh, I found it. It was in my Spam folder.

P: We find your code amazing. Unfortunately your codepage doesn’t work with multilingual documents.

A: Yes, I need to fix that.

P: We can send you UTF-8 version, since our text editor is set to save in ANSI by default which isn’t too good.

A: Either works. I think my webpage is just not telling the web browser the content type.

P: We sent you upgraded version of our first JSON file (Polish characters should now work correctly) and other JSON file with information on the project we mentioned. Could you check on our English and upgrade it accordingly if there are mistakes?
Representative Chat #2 (cont’d)

A: Yes, I can.

P: *Since we get our grade basing on the validity of the links to your site, please don’t delete it too fast.*

A: OK, I won’t.

P: *Thanks m8!*

A: Looks much better now. I am going to add a few features to my JavaScript to make your midterm a better user experience and hopefully give you a better grade.

P: *Thank you!*

A: No problem.

P: *Thanks for cooperation, we are going to dinner! Bye.*

Polish Students’ Comments
On the Lecture

- In the beginning, hard to understand what was hidden behind the words “human factor.” But when we got into it, I must say it was really interesting point of view on web programming.
- First of all, he speaks very clearly so the language barrier disappeared — it was very important to me.
- I found this lecture great! … Every time we see something new, it’s interesting, stunning and amazing. Well, it was this time as well.
- This amazing American style of teaching made it interesting.
- I really appreciate [him] waking up so early just to say some words to Polish students (who are very hard to work with and it’s almost impossible to communicate with them).
On the Class

• Class was a total disaster. We were supposed to [connect] with other students from USA. None of this worked. Exercises made no sense. Not clear enough. Templates made by these USA students were not complete at all.

• Class exercise dominated by communication problems. It should have been a little bit better prepared.

• Class with assignments was a little bit unsuccessful — but still, a good idea. Cooperating with other students and their code this way was nice exercise.

• As for class, I also liked it very much. Our task was simple, yet it required from us to do some work and research. Unluckily our group didn’t have a chance to talk with American students. All in all — our last class was great!
Conclusions

- Do not be overly ambitious. It’s fine to start small.
- Start early. There are lots of kinks to work out.
- Plan an activity that will have a life beyond the immediacy of the live connection experience.
- Try to schedule the live connections session so that students can continue working together immediately after the formal class has concluded.
- Google Hangout worked best for us because it allows sharing a single window rather than an entire screen.
- Offer free food and a reasonable number of students will volunteer to participate at almost any time of day!
Thank you

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