

CECS 543

Administrivia, outline, recap,
projects and teams

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CSULB

Administrivia

- Watched video?
- Course outline
- Reading material
- Reviewed 343 material?
- Quiz
- Topic proposals
- Teams
- Tools

Week	Tue	Thu	Deliverable (Sun)
08/31-09/06	Orga & Software eng. process models	Recap requirements engineering and design	
09/07-09/13	Industry Panel	Stakeholder interviews	
09/14-09/20	Project management	Project management	Requirements Spec
09/21-09/27	Process and project metrics	Process and project metrics	
09/28-10/04	<i>Birgit gone (work!)</i>	Estimation for software projects	Design Spec
10/05-10/11	Project scheduling	<i>Midterm?</i>	
10/12-10/18	Risk management	<i>Birgit gone (work!)</i>	Test Spec
10/19-10/25	Maintenance and reengineering	Maintenance and reengineering	
10/26-11/01	Dependability of systems	Dependability of systems	Implementation
11/02-11/08	Reliability engineering	Reliability engineering	
11/09-11/15	Safety engineering	Safety engineering	Documentation
11/16-11/29	Security engineering	Security engineering	Complete Delivery
11/30-12/04	Resilience engineering	Resilience engineering	Presentation slides
12/08	Presentation for industry stakeholders		
12/11-16	Final exam (date will be set by CSULB, not known yet)		

Reading material

- Software Engineering: A Practitioner's Approach. 7th Ed. Roger Pressman.
Specifically chapters 24-29
- Software Engineering by Ian Sommerville.
Publisher: Pearson.
Specifically chapters 10-14
- Slides will be on BeachBoard

Reviewed 343 material?

- Who took 343 last semester?
- Who took it earlier?
- Who never took 343?
- How do you feel about the content?

- How did you like the IDEO kit?

Quiz (1 of 2)

- Which one is the right order of activities?
 1. Design – Requirements Engineering – Implementation – Test – Delivery
 2. Requirements Engineering – Design – Implementation – Test – Delivery
 3. Requirements Engineering – Test – Delivery – Design – Implementation
- Which one is not a Requirements Engineering activity?
 1. User Interface Requirements
 2. Acceptance Criteria Specification
 3. Algorithm Design
 4. Stakeholder Interviews
- Which techniques work best to specify the internal behavior of the system?
 1. Use cases and user stories
 2. Mock-ups and wireframes
 3. Activity diagrams and message sequence charts
- Which one is not a software development process model?
 1. Agile
 2. Automated
 3. Iterative

Quiz (2 of 2)

- What is a stakeholder?
- What is the Agile Manifesto?
- What is an application domain?
- What are sources of domain knowledge?
- What types of diagrams can we use to model a system's behavior?
- How do you identify components or classes?
- What is a design pattern?
- What are quality attributes?
- How do you test software?
- How do you assess quality in a software system?

Topic proposals

	Topic	Votes	Team assigned?
1	Resilient Smart Gardens	5	
2	SE4S Toolkit	5	y
3	Bartering System	17	y
4	Google Maps Navigation add-on	9	y
5	LB Nonprofit Partnership Website and CRM	9	y
6	Shared Science Website with CRM	5	
7	LB Comm. Telev. & Media Corp. Online Presence	3	y
8	Professional Abilities Association of America Online presence	9	
9	Kaarma	10	y
10	Long Beach Water Department (new!)		?

Topic 1: Resilient Smart Gardens

- **SE4S Lab**
- **<http://web.csulb.edu/~bpenzens/se4s/smart.html>**
- Stakeholder Birgit Penzenstadler: This project uses an Edison Board and sensors to connect to a growing bed and to measure with how little water we can get away for growing vegetables in Southern California. If you have always wanted to develop something with embedded systems, this is for you.

Topic 2: The SE4S toolkit

- **SE4S Lab**
- **<http://web.csulb.edu/~bpenzens/se4s/>**
- Stakeholder Birgit Penzenstadler: This toolkit is an online guide for developing sustainable software systems. There are a number of academic papers and conceptual reference models (like a Stakeholder Reference Model and a Goal Reference Model) that I want to provide in an online tool. The tool shall include a written guide and online diagramming of the models.

Topic 3: Bartering System

- **SE4S Lab**
- **<http://web.csulb.edu/~bpenzens/se4s/>**
- Stakeholder Birgit Penzenstadler: Imagine a better version of Craigslist that allows to trade goods and services in a local community. For example, you have a lot of vegetables in your garden and trade a box of that against a haircut from your stylist around the corner (who doesn't have a garden).

Topic 4: Green Education Website and CRM

- **Green Education Inc.**
- **<http://greeneducationinc.org/>**
- Problem statement by stakeholder Stella Ursua: “Our goal is to educate future homebuyers about energy efficiency mortgages and loan programs that are available to individuals during the purchasing process. These mortgages/loan programs have been proven to save the homebuyer energy and decrease energy bills, create healthier indoor air quality and high performing homes, and create local, good green jobs in the process. The programs have not been effectively promoted in the past and both real estate agents and homebuyers still do not see the value in investing in these programs.
- Our Real Estate Advisor has been extensively involved in coordinating training events for over 600 realtors in Southern CA over the past 3 years, and only a handful of homebuyers have bought into the mortgage/loan programs during this time. We believe that there should be a way to connect to future homebuyers before they enter into the escrow process. Currently, that information is not available. We are planning to conduct regular workshops and forums about these programs throughout the city, but our efforts are simply like being blindfolded while trying to hit a baseball...no focus and no available data about which audiences to target. We need your help.”

Topic 5: LB Nonprofit Partnership Website and CRM

- **Long Beach Nonprofit Partnership**
- **<http://lbnp.org>**
- Problem statement by stakeholder Linda Alexander: “We are in the midst of developing our website and need talent to make it a reality. While we have had a website for a number of years, it has just been a few template pages on a web developer's website. For obvious reasons (from marketing, to design, to flexibility, to our SEO). We have a great web developer, but need the front end design team support (incl: identifying the right Wordpress style, working with the graphic designer, communication with our CMS, content design and upload, and more). In addition, we could use help to revamp our CMS. We purchased it off of the shelf and did not get either the appropriate design support or the training to manage it. It has become a real mess. The project might be a revamp of the CMS, a clean-up or a full redesign.”

Topic 6: Shared Science Website with CRM

- **Shared Science**
- **www.sharedsciencefun.org**
- Problem statement by stakeholder Jacquie Viale: “Our organization has grown quickly and we have been trying to find the right product to offer online registration, email communications, data analysis, outreach, and resources for our staff. We have a subscription to active networks, but it does not serve all our needs. We'd like to explore Google for Nonprofits and Education but the time to do so is beyond us right now. We need to be able to serve our employees with easy reporting of hours, equipment inventory and requests as well.”

Topic 7: Long Beach Community Television & Media Corporation Online Presence

- Problem statement by stakeholder Kenneth Roth: “Our problems are myriad. The organization is transitioning from being a leader in driving the return of public access television to Long Beach to being a grassroots volunteer-run public interest radio station. Within that capacity, LBCTMC seeks:
 - 1). to differentiate and promote itself separately from its previously role in the formation of PadNet and to create the perception of itself as the premier voice for public interest news, music, and promotion of Long Beach's unique and longtime role in the development of cutting edge music and diversity of voices.
 - 2). to develop an online "in-take" capability for both volunteers/operators and content producers, with the sufficient data capture to determine volunteer skill-sets, content areas of intersts, and make available public opportunities to financially support the station.
 - 3). to integrate an email blast capability that draws from databases of volunteers, content developers, public supporters and interested others requesting program information for a biweekly update on activities, programs and other developments associated with the station.We are fortunate to have on our board a CSUDH digital media arts professor and award-winning media professional who can work with students to scope the project, help to identify efficiencies, and avoid scope creep.”

Topic 8: Professional Abilities Association of America Online presence

- **Professional Abilities Association of America (www.paaofa.org): Online presence**

Problem statement by stakeholder Mary Zendejas: “We are in need of the following;

1. A good and attractive and inviting website.

We have a website but it is was created with very limited knowledge of web designing. We need help in making a spectacular website that will reach the thousands of professionals living with physical disabilities.

2. We need help spreading the word about our website and provided much needed information.

3. We are having problems with our keeping our members up to date.

We would also like to create an app that would identify all business events in a local area for people with disabilities and without.

4. We need help with our members being able to apply on line for our free services.

5. Uploading our monthly newsletter

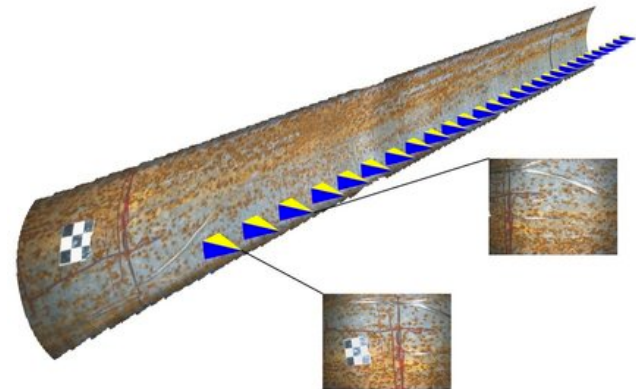
6. Creating a database for easy emailing. “

Topic 9: Kaarma

- **Kaarma, Stakeholder: Animesh Pathak**
- <http://mykaarma.com/>
- The myKaarma messaging system processes a large number of messages (voice, sms, email) at any given time, including conversations between service advisors and customers regarding the issue for whose repair the customer brought their vehicle to the dealership.
- In order to provide the service manager a better view of the performance of her operations, we are interested in *automatically determining the message in a conversation that signals authorization for a repair from the customer to the service advisor.* We have some ideas as to how to approach the problem, but we are looking for the fresh approaches brought by you.

Topic 10: Long Beach Water Department Sewage Pipe Defects

- **Long Beach Water Department**
- **<http://www.lbwater.org/>**
- Image processing software for pipe defects, uses CCTV data and currently operators have to scan that manually, shall be supported by software system.
- OpenCV



Topic 11: Harbor City/Harbor Gateway chamber of Commerce Database

- **Harbor City/Harbor Gateway chamber of Commerce**
- **hchgchamber.com**
- Problem statement by Joeann Valley: “Keeping our data base update, we haven't found a good data base software that can keep up data..Most software is so costly and we cant afford to have one developed for us. Limited volunteers to help keep it update. Communication is always a problem, we send out consent contact once a week, but we need to come up with a complete plan how to communicate with our members. Keeping our data baser up to date on the web site is a challenge for us. We also need to communicate to our businesses about a zip code issue we have. many of our businesses have a zip code of a neighboring community, making it very hard for those businesses to understand what Community they are located in. With out staff its very hard to handle all the day to day jobs, making the data a low priority. “

Topics assigned

	Topic	Assigned
1	Resilient Smart Gardens	
2	SE4S Toolkit	Bhavadeep, Ingmar,
3	Bartering System	Varun, Dharma, Keval
4	Google Maps Navigation add-on	Joshua, Ryan M, Sayli, Aniket, Girish
5	LB Nonprofit Partnership Website and CRM	Ankur, Ritagya, Karishma, Aahi, Gauri
6	Shared Science Website with CRM	
7	LB Comm. Telev. & Media Corp. Online Presence	Brahmnik, Niyati,
8	Professional Abilities Association of America Online presence	
9	Kaarma	Vikas, Prashanth, Shashank, Goutam, Shiva
10	LB Water Department	
11	Automation Pro	Ramzi, Chris
12	3D Printer	Darren, Everardo

Tools & Teams

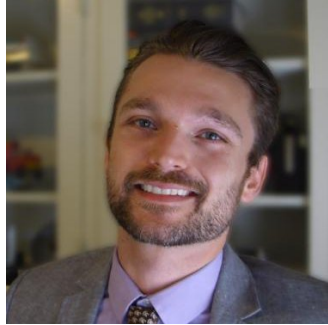
- Submissions via BeachBoard Dropbox
 - If there is a field “Name”, please fill it in 😊
- Teamwork (internal and back-up)
 - Team leader
 - Google Drive for document sharing
 - Github as a code repository
 - Add me @kamikitty
 - Bug tracking tool (e.g. BugZilla)

This is how we roll...

- Reports and deliverables due Sunday 11:59pm
- PDFs for all documents except code
- Industry stakeholders will come for interviews next week
- Identify sufficient requirements that make the project worth for a graduate level course.

Thursday, Sept 3

- Assign a team leader
- Recap requirements engineering and design
- Bring a list of questions for your stakeholders



Lincoln Bauer
WE Labs



Lisa Mae Brunson,
Wonder Women Tech



Alexa Fleur, Critique^it

Industry Panel

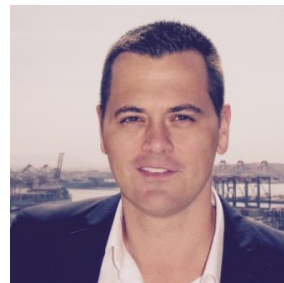
Sept 8, 2015

7pm-8:15pm

LA5-147



Andy Moeck,
moec, etc...



Scott Wayman,
Kangaroo Time



Martin Canchola,
Apartment SEO



Jap Dysart,
Jloop