MIS 3504
Digital Design and Innovation Studio

1: INTRODUCTION

Stephen Salvia

WELCOME BACK
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Office Hours:
Monday/Wednesday 6:00 PM – 7:30 PM
by phone 267.242.5439

Tuesday / Thursday 8:30 PM 9:30 PM
after class  MIS Department Office SP210
course overview
This course is required
This course is demanding
There is a lot of work
Grading will be tough
Assume about 10% A’s
This course is **DIFFERENT**
This course is a STUDIO
course objectives
Primary Course Objectives

• Prepare you for the role of a modern Business Analyst
• Make you a thought leader
• Combine the strengths of Business Process Analysis with Design Inquiry to create Innovative Solutions

BA + Design Inquiry = Innovative Solutions
Course Objectives: BA

• **Analyze** a business process and specify requirements for improving that process
• **Apply** information gathering techniques to elicit requirements which will be used to compose business and technical requirements.
• **Recommend** information systems solutions to improve or transform business processes.
• **Make** “as is” vs “to be” analyses, justify proposed process information systems solutions.
• **Implement** and negotiate changes to requirements.
• **Encourage** independent and CRITICAL THINKING
Course Objectives: **DESIGN**

- **Understand** the shift from Quantitative to Qualitative thought
- **Learn** methods of User Centered / Ethnographic research
- **Learn** collaborative working methods
- **Learn** iterative working methods / experimentation
- **Think** and communicate visually
- **Provide** effective evaluation and CONSTRUCTIVE CRITICISM
Course Blog

http://community.mis.temple.edu/mis3504summer2015011/
Text Books


## Grading

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Exam 1</td>
<td>20%</td>
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<tr>
<td>Exam 2</td>
<td>20%</td>
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<tr>
<td>Exam 3</td>
<td>20%</td>
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<tr>
<td>Individual case assignments and class participation</td>
<td>20%</td>
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<tr>
<td>Team Project</td>
<td>20%</td>
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</table>
Exams (20% each)

• 3 exams
  – 55 minutes long
  – Multiple choice
  – Half covers all readings and class discussions
  – Half requires you to apply techniques
  – Graded 0-100%
  – Combined exams = 60% final grade
Individual Work (20%)

• Project Scope
• Process Flow and Design
• Data Diagram
• Business Rules
• JustinMind assignment
• Class Participation
Team Project (20%)

- Analysis of existing situation and proposal of a solution
- Produce a working prototype using Justinmind
- Accompanying documentation
- Team presentation
- Exercises and Assignments will help build your final submission
- Completeness and consistency are critical
- Personal project grades based on your performance, participation and peer evaluations
Assignments

• All assignments are based on the project case and contribute towards its completion.

• Listed in the syllabus by week due. Due on date indicated.

• Due at the beginning of class on paper. Bring your work electronically also!

• Several students each week will be randomly selected to present their work for review.
Classes

• Bring your assignments
  – Due at the START of class
  – Paper and ELECTRONIC formats
  – Random people will present their work
• Come prepared to discuss and participate
  – Classes will discuss and elaborate on readings, not review them
• Class contributions
  – Say your name before you share
  – You will be called upon to share your work
  – You will be asked questions
  – Lack of preparation will affect your grade
• Classroom Etiquette
  – BE PRESENT
  – Be on time
  – Cell phones off
  – Private discussions outside
  – Bring your computer but use it for class
We may have to make adjustments
<table>
<thead>
<tr>
<th>Class</th>
<th>Topics</th>
<th>Individual Assignments</th>
<th>Team Assignments</th>
<th>Individual Deliverables due</th>
<th>Team Deliverables due</th>
<th>Reading assignment</th>
<th>Addition Material</th>
<th>Topic</th>
<th>Exams</th>
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</thead>
<tbody>
<tr>
<td>1 5/12/2015</td>
<td>Introductions BA Role Project Client / Sponsor Introduction of JustinMind</td>
<td></td>
<td></td>
<td>Team building</td>
<td>Seven Steps Chpt 1</td>
<td></td>
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<td>Class 1.1</td>
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<tr>
<td>2 05/14/2015</td>
<td>Requirements Stakeholders</td>
<td>Assigned JustinMind Lab - Due class 3</td>
<td>In class team work assignment:</td>
<td>Requirements and Stakeholder submission in Class assignment</td>
<td>Seven Steps Chpt 2 Jogger 1 - 28 Requirement overview Jogger 62 - 63 - Stakeholder Profiles</td>
<td>Warehouse Case_Stakeholder Stakeholder Template</td>
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<td>Class 1.2</td>
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<tr>
<td>3 05/19/2015</td>
<td>Project Scope Elicit Requirements Interviews</td>
<td>Develop Scope from Warehouse Case - Due class 4</td>
<td>Team Project Topic - Due class 4</td>
<td>Turn in JustinMind Prototype Introduction Lab</td>
<td>Seven Steps Chpt 3 Jogger 28 - 42 - Vision Statement Seven Steps Chpt 4 Jogger 43 - 49 - Elicit Requirements</td>
<td>Dysfunctional Warehouse Case</td>
<td></td>
<td>Class 2.3</td>
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<td>4 05/21/2015</td>
<td>Process Flow Swim lane Flowchart</td>
<td>Assign Sales Order Case, develop process flow and design Due class 5</td>
<td>Team sharing of topic Assign Team Project Scope</td>
<td>Turn in individual Warehouse scope</td>
<td>Seven Steps Chpt6 pages 232 - 235 Jogger122 - 126</td>
<td>Sales Order Case Swim lane template</td>
<td></td>
<td>Class 3.5</td>
<td>Exam 1 Chapter 1, 2, 3 and 4</td>
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<tr>
<td>5 05/26/2015</td>
<td>Understanding Client Data Entities/Elements Introduce Project Case, Interviews</td>
<td>Assign Night Owl Case, develop Data and views Due class 6</td>
<td>Assign Team Project Scope Draft class 6</td>
<td>Turn in individual Process Flow and Design</td>
<td>Seven Steps Chpt6 pages 235 - 237 Jogger 183 - 189</td>
<td>Night Owl Case</td>
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<td>Class 4.6</td>
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<tr>
<td>6 05/28/2015</td>
<td>Developing Business Rules</td>
<td>Assign Gas Woks Case, develop business rules and design Due class 7</td>
<td>Client Interviews</td>
<td>Turn in Individual Night Owl Data Case</td>
<td>Turn In team project Scope</td>
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<td>Class 5.7</td>
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<td>Class</td>
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<td>7 06/2/2015</td>
<td>Design Thinking</td>
<td></td>
<td>Assign Prototype development, data, business rule, process Due Class 8</td>
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<td>Seven Steps Chp 7</td>
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<tr>
<td>8 06/4/2015</td>
<td>Create persona, user stories Creating scenario Project Case Interviews</td>
<td>Assign Persona and Scenarios due for Class 9</td>
<td></td>
<td>Draft views of &quot;As is State&quot; Data, Business rules and Process flows</td>
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<td>Chp 6 Jogger 77 - 81</td>
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<td>Class 7</td>
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<tr>
<td>9 06/9/2015</td>
<td>Review Process Selling your idea Document Business rule - Project focus</td>
<td>Assign Draft Prototype views Due for Class 10</td>
<td></td>
<td>Draft views of Persona(s) and Project Solution Scenario(s)</td>
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<td>Class 8</td>
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<tr>
<td>10 06/11/2015</td>
<td>Solution Design Reviewing a prototype</td>
<td>Peer level reviews Prepare Presentation for Class 11</td>
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<td>Draft views of project Prototype pages</td>
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<tr>
<td>11 06/16/2015</td>
<td>Project and Presentation deliverables review</td>
<td>Complete final deliverables due Class 13</td>
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<td>Presentation</td>
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<td>Class 9</td>
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<td>12 06/18/2015</td>
<td>Group Presentation</td>
<td>Team Presentations</td>
<td>Final Project Materials due</td>
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<td>Class 10</td>
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Extra Credit

• 4 opportunities to earn extra credit points during the semester.

• Students are required to produce a prototype in Justinmind for each of the following class exercises:
  – Warehouse Scenario Prototype
  – Night Owl Data Prototype
  – Mortgage Program
  – Gas Company Prototype

• Students who submit prototypes that are complete AND well done will earn up to 1 point on their FINAL grade for each. (Maximum of 2 points total)
How do I get an A?

1. Read the material before class
2. Come prepared to ask questions/discuss
3. Put effort into doing your assignments and team critiques
4. Take in-class exercises seriously
5. Study hard for the tests
6. Produce a great project solution and prototype
7. Impress me with the quality of your work
8. TIMELINESS and ATTENDANCE
Break 15 minutes
What is **Business Analysis**?

Who is the modern **Business Analyst**?
What is Business Analysis?

“The set of tasks and techniques used to work as a liaison among stakeholders in order to understand the structure, policies, and operations of an organization and recommend solutions that enable the organization to achieve its goals”

- The International Institute of Business Analysis (IIBA)
Business Analysis Involves...

• **Identification** of business problems and opportunities
• **Elicitation** of needs and constraints from stakeholders
• **Analysis** of stakeholder needs to define requirements for a solution
• **Assessment** and validation of potential and actual solutions
• **Management** of the “product” or requirements scope
“BAs with an IT background are very **analytical** individuals . . .”

- B. Carkenord from Seven Steps to Mastering Business Analysis, p 8.

“As a **DESIGNER**, I am much better at **synthesis** than analysis . . .”

- Bill Moggridge from Designing Interactions, p 725.
**synthesis**: the combining of the constituent elements of separate material or abstract entities into a single or unified entity (opposed to analysis)

- From http://dictionary.reference.com/
analysis: PULLS IT APART

synthesis: PUTS IT TOGETHER
Business analysis and Design provide a balanced approach
What are the traits of the most successful business analysts?

- Analysts enjoy learning things and have a rare combination of the ability to see both the big picture while also being very detail oriented.

- Excellent “people skills” – strong listening skills. Good at asking questions and probing for missing information. Good leadership skills.

- Strong technical awareness – Understands all facets of software development.

- Constantly working on improving their skill set.

- Creativity
Why would anyone want to be a BA?

• You like technology, but not so much that you want to do it all the time.
• You like solving problems
• You like working with people and understanding their needs and concerns
• You get bored easily doing the same thing over and over
• Inefficiency and lack of effectiveness annoy you

And...
# Business Analyst Career Path

<table>
<thead>
<tr>
<th>Title</th>
<th>Experience</th>
<th>Tasks</th>
<th>Average Salaries from Indeed.com</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Business Analyst</td>
<td>0-2 years; may have business experience or IT development experience</td>
<td>Elicit and document requirements for small, well-defined projects, often changes to existing systems. Ideally works with a BA mentor.</td>
<td>$55,000 - $60,000</td>
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<tr>
<td>Business Analyst</td>
<td>2-5 years</td>
<td>Elicit, analyze, and document requirements for medium to large projects. Works with the project manager to scope new projects.</td>
<td>$77,000+</td>
</tr>
<tr>
<td>Lead or Senior Business Analyst</td>
<td>5-10 years</td>
<td>Elicit, analyze, and document requirements for large, complex, mission-critical projects. Supervises/mentors junior Bas. Works with the business to initiate and define new projects.</td>
<td>$89,000+</td>
</tr>
<tr>
<td>Business Consultant/Client Relationship Manager</td>
<td>10+ years</td>
<td>Assist the business with strategic planning, business case development, and new product implementations. Helps to identify projects. Sets up and manages a business analyst center of excellence</td>
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</tbody>
</table>
• Where do business analysts come from, IT or a business unit?

• Which is better?

• Who do business analysts work for, IT or a business unit?
Summary: Basic Model

Events Trigger

• Opportunities
• Problems

Steps

1. Analysis of the event—Ask the right questions
2. Design a solution—What are the possibilities
3. Implementation - Build/implement the solution
team formation

1. select a team liaison
2. exchange contact information
3. Liaison emails to me slsnite@temple.edu

Team Name
Team Number
List of members
Introductions
Who am I?
The Two Minute Presentation

• Short and concise summary
• Two minutes is just right
• Situational
  – Biographical background for recruiters
  – Personal & project background when meeting subject matter experts
  – Project summary for leadership (elevator speech)
• Write it out if you want
Who are YOU?
2 Minute Presentation Exercise

• Sit with your team
• Take 5 minutes to prepare your 2 minute biography
• Cover key points (situational)
  – Where are you from?
  – Any background information you might want to include
  – What brought you to Temple?
  – What made you want to major or minor in MIS?
  – What are you looking to do when you graduate?
  – What are your other strengths and interests?
• Each team member presents their 2 minute biographies
Congratulations!
You are now a team.
What do you want to learn from the interview with a project sponsor?
Questions should be:
- Broad to start
- Appropriate for the person being interviewed
- Start general then more specific
- Open-ended
As a team:
Prepared questions (in writing) in priority order
JustInMind

1. **Download** trial program from website [http://www.justinmind.com/]
   Prototyper Pro Edition 6.4

2. **Access** your license key

3. **Unlock** the full version of the program

4. **Learn** how to use it
END