ISE218 PROJECT

Project

- Your semester project will consist of a thorough analysis of the architecture of
  - a recent or classic computer-based product.
  - A component typically licensed to product developers with differing sets of features (e.g., a graphics processor)
- You can work alone or in a team of up to 4 students (team approach recommended)
- The project should demonstrate your thorough understanding of that product
Project Topic

- You can choose a project topic, as long as it is not already selected by another student group.

<table>
<thead>
<tr>
<th>Team</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sany, Husen, Yenka, Vedamuthu, and Kevin Vilemova</td>
<td>Sony PlayStation 4</td>
</tr>
<tr>
<td>Cesar, Liliana, and Tobias Villez</td>
<td>Amazon Fire TV 7</td>
</tr>
<tr>
<td>Alex, Emily, and Kyle</td>
<td>HTC Vive</td>
</tr>
<tr>
<td>John, Brian, and Tina</td>
<td>Apple Watch Series 7</td>
</tr>
<tr>
<td>Ruth, Will, and Marc</td>
<td>MacBook Pro</td>
</tr>
<tr>
<td>Annette, Ryan, John, and Holly</td>
<td>Microsoft Surface Pro</td>
</tr>
<tr>
<td>Ruth, Will, and Marc</td>
<td>Microsoft Surface Pro</td>
</tr>
<tr>
<td>Tian, David, and Alice</td>
<td>Toshiba Qosmio X870</td>
</tr>
<tr>
<td>John, Emily, and Mark</td>
<td>Nokia Lumia 920</td>
</tr>
</tbody>
</table>

Project

- You should select a product that is of some interest to you and one that is fairly recent or classic.
- Typical products include laptops, navigation devices, smartphones, game controllers, etc.
- If you pick a project used previously in the course:
  - You will receive the material from the previous project.
  - Expectations of your project will be much higher.
L12 – Project Discussion

Sending Projecting Components

- Send project title and group members to me in an e-mail message
- All other project components should be sent to your TA (with a copy to me)
- TA assignments on the unofficial class roster
- Your TA assignments might change based on your team membership

When Do You Present?

- In class
- During finals week
  - 5 point disadvantage
  - Extra time advantage
- Request time with an e-mail to me
- Verify time (and team) on ISE218 home page
**Project**

- There can be no duplicate projects among the student teams
- The first team to request a project topic will be assigned the topic (if otherwise appropriate)
- You can elect to work on the project as part of a team composed of up to four students

**Deliverables**

- No later than 10/10 - product you will analyze. You should also identify your partners in the project (if any).
- 10/17 - Send a brief (1 page) MS Word or PDF document that describes the importance of the product.
- 11/14 – first draft of the slides you intend to use. It should accurately convey the structure (i.e., all slides), but not necessarily all the detail
- 5 days before your presentation date - near-final PowerPoint file you will use in your presentation.
- 11/21-12/7 In-Class presentation
- Finals week - Presentations (by appointment)
Grading

- You will be graded on
  - Final presentation
    - Demonstrate a deep understanding of course material as it relates to your selected product
    - Presentation and response to questions will demonstrate understanding
    - Satisfaction of expectations (next slide)

It is possible for project grades to differ among teammates

Project grade might be lowered if you are late in your deliveries

Expectations

- Your presentation and slides should demonstrate:
  - A brief introductory summary of the product that includes its purpose.
  - An understanding of the technology surrounding the project, specifically every element in the spec sheet.
  - An understanding of the cost drivers in the system. That is, which of the components are the most expensive.
  - An understanding of the implications of the product components. For example, you should be able to comment on subsequent improvements to the product based on trends in component technology.
  - A comparison with similar products. If the product is more than a few years old, you should compare the product with current generations of the product.
## Presentation Hints

- Always introduce your team
- Everyone should participate
- Practice your presentation to be sure of your time
- Don’t read from slides or notes
- Use slides that are compatible with the projector
- Be sure that you slide text is visible in the room
- Someone should record actions in sample presentations
- Sometimes a real product is helpful
- Avoid too much time spent on the use of the system

## Hints

- Be sure to start with a technical spec sheet.
- Be sure to include specific performance numbers in your presentation
- Your presentation and slides should be targeted at an audience of technical professionals.
- Use very professional PowerPoint slides.
- Plan on about 1 minute per slide, (25 slides).
- Convey a deep knowledge of the material *(from each member of the team)*