Presentations for CSE 403, Software Engineering

This class is a senior level class for Computer Science and Engineering majors. They have strong software development skills, but in most cases have not yet participated in a large development project of commercial consequence. 50 students are registered.

My goals for the class are:

1. Help the students develop a good understanding of the context in which software development takes place.
2. Expose them to practical ways to be productive within this context and help them gain some experience on development projects during the quarter.
3. Provide some inspiration showing how the difficult task of efficient and effective software development can be an interesting challenge, worthy of an entire career.

Invited speakers for the class are a great help in reaching these goals as they bring "real-world" experience to the class and can explain in practical terms what really happens when the rubber meets the road in a significant project.

Topics that would be useful to include in a presentation are:

1. Company description. Brief history, size, market for company products.
2. Market for development group products. What is the primary market for the products of the group that you are describing? Embedded, desktop shrink-wrap, desktop in-house, server commercial, server in-house, etc. National, international? Who purchases your products? Who actually uses your products?
3. How are your projects identified? Where do the requirements come from, where does the money come from?
4. What is the typical project life cycle? How is it organized? Are there specific processes that are used at various stages in a project?
5. Development group description. How would you describe your typical development group? Numbers of people, location (local, national, international), skills, duration of membership, organizational context, etc.
6. What are the specific details of your software development process? Requirements specification, development tools, programming languages, build strategy, delivery techniques, customer interactions, etc. Live examples of the tools and techniques?
7. Examples of real projects and lessons learned. Major successes? Major failures? Live examples of the products?
8. Contacts and links for follow up if students are interested in more info.

Feel free to add, delete, and emphasize topics as you feel is appropriate!

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