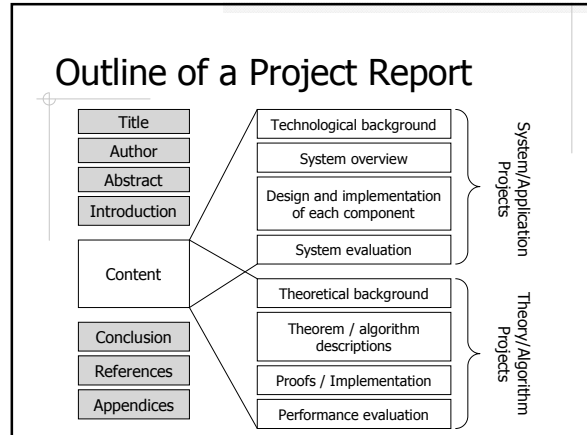CS491B Software Design Lab
Writing Project Report

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Outline of a Project Report

What is a Project Report?

- Project report **!=** documentation
- A project report should tell
  - What is your project?
  - Why did you choose the project?
  - How did you conduct the project?
  - What are the results/products/lessons of the project?
- A way to evaluate your technical writing skills

Title

- Don't be too generic

Abstract

- Tell the whole story in 100 to 200 words
- A good abstract
  - Let people know you've done good work
  - Make people want to read more

Introduction Section

- A more elaborated version of the abstract
- Focuses on
  - Motivation
  - Project highlights

Technological Background

◈ Introduce the technologies/tools/platforms you used to build you project
  - Be clear about the connections between the pieces
◈ Assume your readers are students who just took CS202
  - E.g. how do you describe a J2EE project??

System Overview

◈ The *Big Picture* of your project
◈ Descriptions of the interaction between different components, overall work flow etc.

Design and Implementation …

◈ Design (or feature design), is how things should be
  - E.g. `The system support several types of users …`
◈ Implementation is how things are done
  - E.g. `Each user type is implemented as a subclass of a User class ..`

… Design and Implementation

◈ Writing about design and implementation is not easy
  - Choose the right *level of details*
◈ Topics that are usually interesting and/or important
  - Performance
  - Security
  - Improvement of user experience
◈ Insights, insights, insights

System Evaluation

◈ Results produced
◈ Comparison with other systems
◈ Load testing

Conclusion Section

◈ Reiterate your achievements
◈ Emphasize lessons learned and insights gained

Appendices

- API documentation
- Database schema
- User manual
- Source code
- ...

Some Technical Writing Do's and Don'ts

- Use formal language
- Use diagrams and figures
- Use tables
- Don't overuse pictures and screenshots
- Don't overuse bullets
- Don't overuse passive voice
- Use "We" instead of "I"

Past CS491 Reports

- All CS491 project reports are available at http://sun.calstatela.edu/~abet/cs491/index.html
- Some good reports
  - Matthew's *ProgFest 2005 Platform*
  - Chris's *Deep Space 2*
  - Andrew's *CodeSimian*
  - Cheralyn's *Cupboard 2.0*
  - Christopher's *LemGen*
  - Kelly's *Content-based Image Organization*