Final Design Report
Expectations

Concepts I
Thursday 9\textsuperscript{th} Week

Concepts I – Final Design Report

Abstract
Introduction
Description of mechanism
Simulation
Testing
Discussion and Conclusion

Grade
33\% English
33\% Technical content of report
33\% Competition placement
Abstract

• 4 to 6 sentences summarizing the report.
• State
  – Distance projectile flew
  – If design was successful or not

Introduction

• History of trebuchet
• Project objectives (user + client)
• Design constraints (user + client)
• Summary of theory of trebuchet operation
• Discuss all three conceptual designs
• Discuss the primary design
• Outline report contents
Description of Mechanism

• Same as usual, describe all key parts
• Refer to four view and assembly drawings

Simulation

• Discuss how simulation was used to optimize device performance
• Provide proof that optimization was done (at least two plots)
• Text should discuss significance of plots, meaning, how results impacted design specifications.
• Discuss limitations of simulation
Testing

- Describe how testing was conducted
- Discuss results of testing (refer to tables or plots), mean and impact on design specifications
- At least two specifications must be manipulated for performance optimization

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Discussion and Conclusion

- Summarize the outcome of the competition for your device.
- Summarize the outcomes of simulation and testing.
- Discuss why reality differed from simulation?
- What might you change if more time or one limitation lifted – quantify impact
- Was you design Successful?
Team Evaluations

- Two work sheets (you will get during mini-review)
- Also leader write one paragraph on each individual
- Have signed paper indicating who was responsible for which tasks

References

- Give credit to sources of information
- Websites, movie, books, magazines etc.