# simplyCT A Lightweight Digital Library Framework

MSc Research Proposal

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## What is a Digital Library System?

- Digital Library System (DLS)
  - Collection of digital objects
  - Store, manage, access and preserve digital objects
  - User interface+services+repository
- Application Domains
  - Institution repositories
  - Cultural heritage collections

### Institution Repositories

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## Cultural Heritage Collections



### Internet Archive

University of Cape Town



### **Department of Computer Science**

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#### Calendar

Take a look at our Department Calendar

Events

The 9th International Olympiad in Informatics (IOI) will be hosted by South Africa at the University of Cape Town from Nov 30th to Dec 7th, 1997. This will be the first time that the IOI has been held on the continent of Africa!

#### Colloquia Colloquia

Finterested in postgrad Computer Science studies at UCT in 1997?



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Last Modified: 07 Feb 1997



### Problem Statement

- Complexity of existing solutions
  - Preservation costs
    - Initial costs
    - Maintenance costs
    - Recovery costs
  - Environments with limited resources
    - Cultural heritage organisations
    - Developing countries

### Related Work

- Frameworks
  - DELOS DL Reference Model
  - Kahn/Wilensky Framework
  - 5S Framework
- DLS Software Tools











### Research Questions

- Hypotheses
  - A formal simplistic abstract framework for DLS can be derived
  - Simplified DLS can be more easily adopted and managed over time

### Research Questions

- Is it feasible to implement DLS based on simple architectures?
  - How should simplicity for DL storage and service architectures be defined?
  - What are the comparative advantages between simple and complex architectures?

## Methodology

- Pilot Study
  - Collection Prototype
- Theory Derivation
  - simplyCT principles
  - Case study of existing DLS
  - Mapping of simplyCT principles
- Design and Implementation
  - Extension of prototype DLS
  - Collection Integration

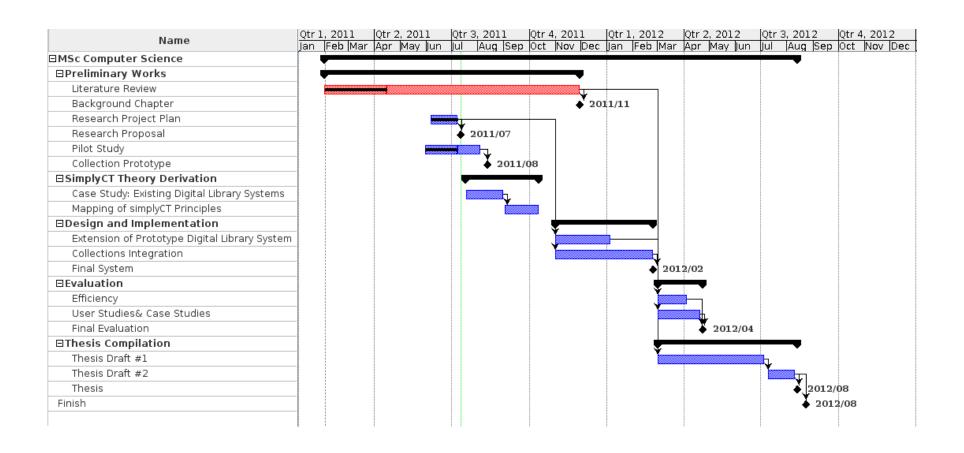
## Methodology

- Evaluation
  - Effectiveness
    - Real world case studies
  - Usefulness
    - User studies
  - Efficiency
    - Controlled experiments

### Anticipated Outcome

- Formal definition of simplicity for DLS design
- Proof of concept DLS
- Set of principles behind simplyCT framework

### Proposed Schedule



# Questions?