MIS 507 PROJECT PROPOSAL

E-Learning System

# Project Team Members

|  |  |
| --- | --- |
| **Name** | **E-mail** |
| Anirudh Soundararajan | anirudh@email.arizona.edu |
| Aravind Subramoney | Aravind14@email.arizona.edu |
| Rahul Nadathur | rnadathur@email.arizona.edu |
| Tanvi Arjunwadkar | tanvia@email.arizona.edu |
| Vijay Anand | vijayanand@email.arizona.edu |

# Project Proposal

## E-learning system

Our project proposal is to build core software architecture for a simple e-learning system. E-learning system helps students to register for courses online and study their desired courses at the comfort of their place and convenience. At a zero level DFD it would seem like a user interacting with an e-learning interface.

USER

0 Level DFD

It would have core objects at top level like:

1. Students
   1. Registered
   2. Free users
   3. Certificate enrolled
2. Faculty
   1. Permanent
   2. Regular
   3. Visiting
3. Student Assistants
4. Certificates
5. Curricula

A type hierarchy for curricula leading to media content which forms the base for the system.

Figure 2Type hierarchy for course contents

There would be a sub-class super-class hierarchy to implement the similar sub-groups with extensive usage of interfaces to facilitate method implementation. Application of various design patterns like Factory method would come in handy to provide a robust framework. Apart from all these session and variable management could be implemented.

We would like to discuss further in this direction to crystalize the requirements and also limit the scope of the project within course objective as well as implement a better software designed architecture for overall project.

# References:

1. Wikipedia <https://en.wikipedia.org/wiki/Educational_technology>
2. The Design of Software Architecture for E-Learning Platforms by Dongdai Zhou, Zhuo Zhang, Shaochun Zhong, Pan Xie
3. e-learning by design - Horton, William