# E-Learning Course Registration

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### Introduction

- Our project was building a subsection of the graduate students' e-learning web application
- E-learning is distance learning, using technology to learn on an informal basis, where students can learn on their own time and at their own speed
- Many benefits come with e-learning, including
  - High Student-Teacher Ratio
  - Cheaper Cost
  - Accessibility

# Objective

- Our Project was to build a website for teachers and students to interact through media
- We had four basic goals in mind for the project
  - 1. Build a presentable layout. We wanted to be able to show our progress so this was the very first thing we worked on.
  - 2. Establish database structures and the relationships between them. This was especially important when tackling the next goal.
  - 3. Write functions that packaged lessons or courses into zip files.
  - 4. Prepare an organized file system to hold course content.

## **Tools and Methods**

HTML, Javascript, Ruby, and the Ruby on Rails framework were used to build the website.

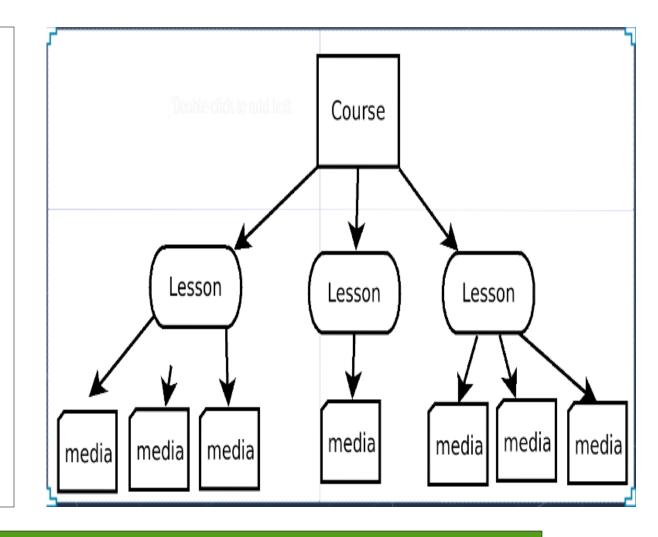
HTML and Javascript were used to generate the layout of the project.

Ruby was the language used to create our database structure:

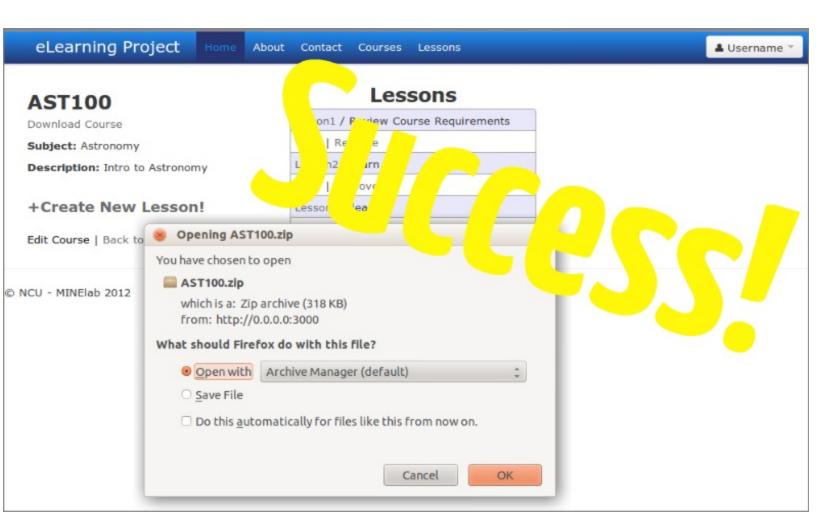
Ruby on Rails, or "Rails" for short, is a framework we used to help manage our database.

Courses, Lessons, and Assets were our three structures. Assets, which hold attachments, belong to Lessons, and Lessons belong to Courses. This way a course could have many lessons, and each lesson could have many attachments (Assets).

Using this structure, we were able to create an easily understandable layout for our website where a teacher can create Courses and Lessons, and upload media to aid in student learning.



#### Results



In the end, we were able to accomplish exactly what we set out to do, which was to create an online environment where students and teachers can interact with each other. When this project as a whole is completed, we hope it will promote collaboration amongst students and teachers. It will provide an alternative or supplement to in-class learning for those who need it.

