

BSc in Computing

Cloud Application Development

Project Description

The aim of this project is to design, develop, and deploy a web application. You are required to submit a single ZIP archive containing your code, the links to the deployed versions, as well as a PDF report explaining your idea, the features implemented, and the justification behind your choice of the deployment platform.

Application Requirement [45 %]

Your application will be coded using Ruby on Rails 3. You are required to demonstrate that you understand how the framework operates by utilising the built in features when completing your project.

The site must, at least, tick the following boxes :

- **Comprehensible goal**
Your application must have a concrete goal
It doesn't need to be innovative or unique
- **Correct use of Ruby on Rails**
The code must be written in the appropriate files
Code must be reused and not copied
Associations, filters, and other components should be used when needed
- **Initialization**
Your database should be generated and filled with the rake command
`rake db:migrate`
`rake db:seed`
- **User accounts**
Users should be able to register, login, and logout
User permissions should limit who is allowed to alter content on the site
Views must reflect the current state, and the rights the users have
- **Error handling**
Missing pages and server errors should present custom error messages
403, 404, 500
- **Gems**
Two gems must be implemented
You must build one custom gem

Deployment Requirement [10 %]

Your application must be deployed, and fully operational on a single cloud platform of your choosing. It can be a platform as a service or an infrastructure as a service. Your decision will need to be justified in the documentation submitted along with a link to your deployed application. Your custom GEM that you create should be deployed to RubyGems.

Document Requirement [45 %]

You are required to write a ten page document covering the four main topics described below. Feel free to use the template given by the lecturer.

- The idea
What is your product ?
Who would be interested by it ?
- The database
What information are you storing ?
Is there any associations between the tables ?
- The code
What can your application do ?
- The deployment
Where could your application be deployed ?
What service did you pick and why ?

All work must be your own. Any external resources like examples, and tutorials must be referenced in your documentation.