

# Applied Technology

## 462/562 Assignment 4

### INTRODUCTION

This will be the first of two assignments based on the **LCM** Ltd. Company – your final assignment will build on what you produce for assignment 4.

You are to develop a Grails application for a company called LCM that specializes in repairing electrical equipment for large companies and factories. LCM repairs large scale electrical equipment by monitoring their heat and vibration outputs. The company produces pdf reports that contain information about specific machines and their problems, complete with detailed photos like the following:



**You are to design a system that will eventually house these reports and allow customers to log in to the system and retrieve the data.**

The first step to completing this system is to design the main layout, main index and error pages and define some key Domain objects and their management.

**This is an individual assignment**

**You will be graded on meeting the required functionality – exactly which functions and code you use to achieve this is up to you – however you must use the Grails Development Kit.**

*Graduates have the option of allowing this application, once finished to be shown to a real client who will consider its use for the real world. Agreeing to use in the real world will void you of payment for these services but will allow you to claim partial authorship credit should your application be chosen to be used. Not being or being chosen will have no impact on your final grade for this or any other assignment in this class.*

## What to do - Requirements

This assignment will test your ability to create a Grails application using scaffolding.

### [GRADED] Grails application and Layout

- You must edit the main layout to remove default Grails branding to be replaced with LCM Branding.
- The Error and Index pages must also have default Grails branding removed
- A 404 Error page should be created and mapped in URLmappings
- You must include the provided marketing information [see file **marketing.txt in the associated materials.zip** ] on the index page

### [GRADED] Grails domain modelling

- You must define and scaffold the views for the following Domain objects to meet the brief
  - Company
    - Name
  - Location
    - Company (belongsTo)
    - Name
    - Address
  - Report
    - Name
    - Location (belongsTo)
    - Publication Date

### [EXTRA CREDIT]

- You may incorporate twitter bootstrap or another css framework to style the elements in Scaffolded pages and the main layout. A well designed layout will get between 1-3% extra course credit.

### [GRADED] Graduate Extension:

**If you are enrolled in any section of 562 – you must also complete the following objective(s):**

- **The Report Domain Object must also have a filename field**
- **You must also create another controller that controls the routing between two actions that**
  - **Shows a view (using the main layout) that allows the user to upload a pdf and select a company**
  - **Processes that file upload, saves the file to a location and creates a Report Domain object, noting the file location in the filename field. After saving it redirects to the Report controllers list action when complete**

## [GRADED] Submission Details

You must upload your submission, including source code inside a zip archive to blackboard by the due date. Your submission should be designed to **work with Grails 2.2.4** and must be in the following format:

- YOURFULLNAME\_YOUR STUDENT ID NUMBER\_AS4.zip *eg.*  
*BobSaget\_A11111111\_AS4.zip*
  - src (folder)
    - .. other documents and folders as required
  - README.pdf (describes your submission **and indicates if you want to be considered for production usage**)

### Source Directory Structure Layout

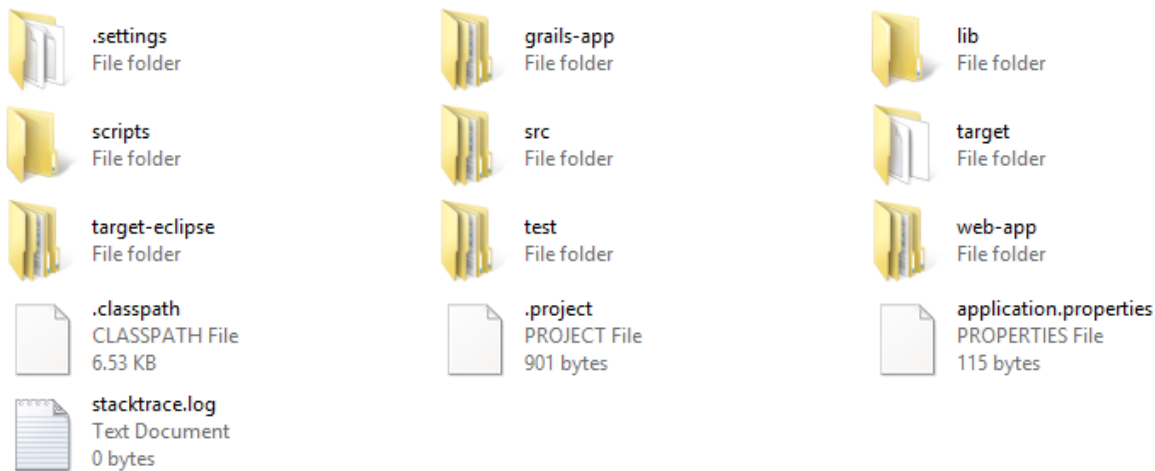
Required elements.

**src/**

**GrailsProjectDirectory**

**LCM\_YourANo\_.war (compiled war file)**

Grails project directory will contain the following (sizes may differ)



## Late Policy

You will lost 10% of your assignment grade (1.2% of course grade) every 24hours that your submission is late, starting from 1minute after the deadline.

Extensions are given in rare circumstances due to serious illness or family issues and will only be considered up to 48 hours before the deadline and with proof of hardship.