

BCPR301

Advanced Programming

Course evaluations from

Co-operative Education

Project 2016 s1

## Introduction

When students of the Co-operative education project were submitting their final report they were asked to analyse their previous courses with what they had learned and in relation to their project. Here we have statements the students have made about what is good about BCPR301 and any recommendations that could be made about the course content. Each statement is made by a separate student and bullet points are used to make this distinction.

## What students think is good about this course

* I think design patterns have been the best thing to have learnt about during my study for my degree
* During the project, I did refactoring to my android app once, abstracted a new class and pull up several methods into it, which improved code reusability and made the code easy to maintain and extend in the future.
* Design patterns are extremely useful for advanced programming. It can improve programming skill dramatically.
* It was definitely worthwhile to have studied design patterns, refactoring, bad code smells, and the Zen of Python. All of these topics are extremely relevant to my current project.
* BCPR 301 assignment 1 (Pulp Alley): Working in a group was a good experience: as a group we had to do a wide range of programming activities (for example, serialisation, unit testing). It was a shame that we had to do so much work for only 10%. The unit testing was relevant to my project
* I think it was good to have done the Kivy assignment, even though it was just a small assignment. In this assignment it was good that we had to identify in the code examples of bad smells, design patterns, and the Zen of Python principles.
* For the project, I learnt AngularJS, and the content of Advanced programming, and other programming courses, enabled me to quickly understand the concepts differences from similar frameworks
* The theory of design pattern helps me a lot, especially when I refactoring our code.
* This class has been helpful in many ways:
  + Being able to discuss the concepts with my class mates
  + Being able to practice them myself in actual projects I have
  + The use of refactoring helped us to determine how we were going to solve the problem that we had.

I was in the middle of PR301 while doing my project. As such, the skills I was developing in PR301 were not used so much in the project. However, PR301 indicates 15 reusability characteristics that are really important when dealing with OO systems. Though I didn’t use the patterns described, I still see the importance of them, which can freely be discussed. I want to learn more!

## What students recommend for this course

* Improvements: I found the project involving legacy code interesting. It involved re-engineering a Cobol program. However, it may be more useful for students to do an assignment which more specifically involves using design patterns and / or refactoring techniques.
* One thing that I can recommend for the improvement of this course is to include lessons about how to access SQL Databases by using python. Databases are widely used nowadays in almost every IT system in every company, so in my opinion, having this included will be beneficial.