

# Staff Development Platform

---

GitHub page: [SDP](#)

## What is it?

---

The Staff Development Platform (or SDP) serves as an educational platform for course delivery in the AB Credit staff development and continuing education programme. Courses are to be prepared by instructors and to be taken by staff participating in the program through SDP.

## Version

---

Beta version 1.0 is to be released in mid-December.

## Usage

---

This project is developed using Python3 on Django. To start the server locally, run

```
pip3 install django
python3 manage.py runserver
```

and access [localhost:8000](#).

## Database

A demonstration database is included. The superuser of the website is

---

username: admin  
password: comp3297

The administrator of AB Credit staff is

username: Admin  
password: comp3297

The instructor (at the same time a participant) is

username: zixuwang  
password: comp3297

The HR is

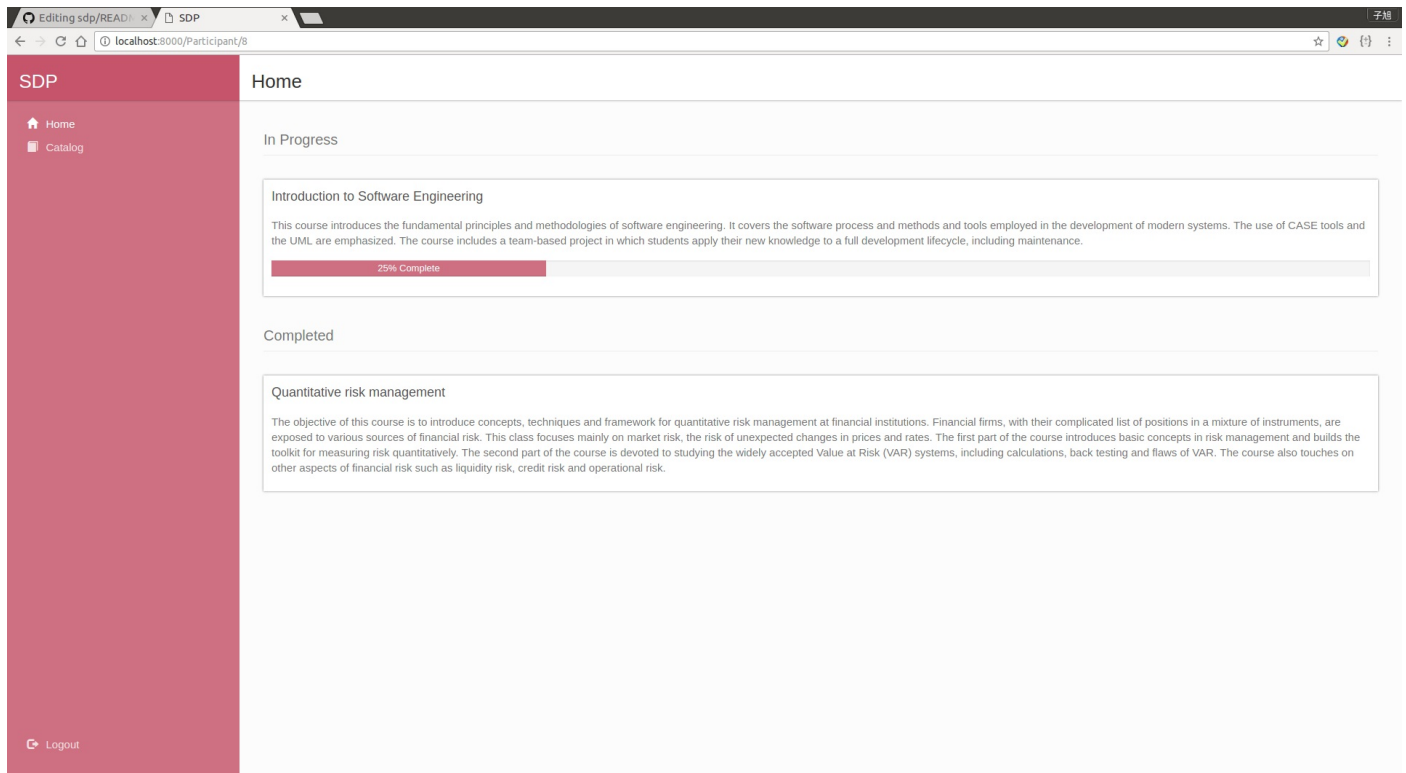
username: changgao  
password: comp3297

A participant is

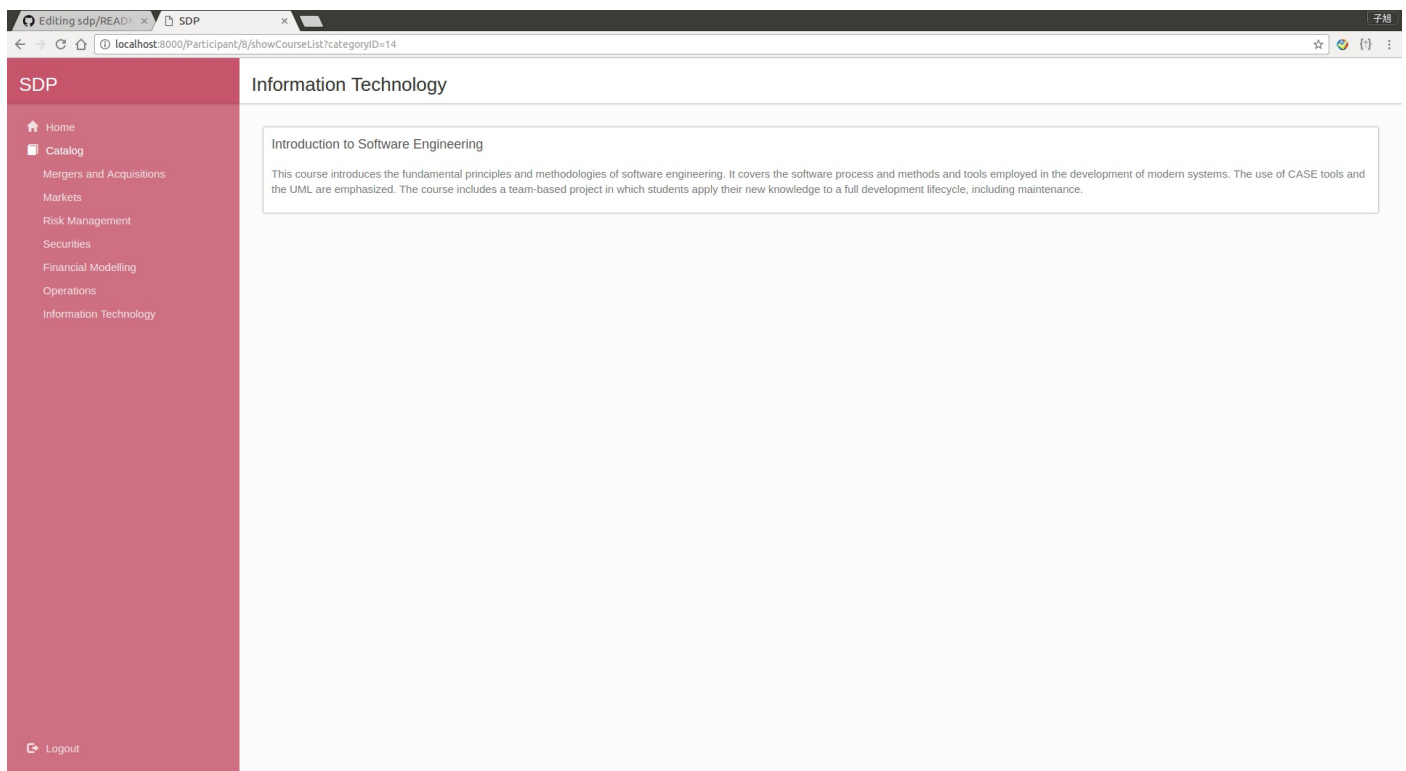
username: jingwang  
password: comp3297

## Participant

Currently enrolled and completed courses will be displayed on the home page of participant:



Participant can explore opened courses under different categories by selecting categories in the left navigation bar:



Editing sdp/READ

SDP

localhost:8000/Participant/7/3

SDP

Home

Catalog

Logout

Introduction to Software Engineering

Enroll

This course introduces the fundamental principles and methodologies of software engineering. It covers the software process and methods and tools employed in the development of modern systems. The use of CASE tools and the UML are emphasized. The course includes a team-based project in which students apply their new knowledge to a full development lifecycle, including maintenance.

Instructor: Zixu WANG

0. Administration

This module introduces basic logistics of this course.

1. Introduction

Why are we doing software engineering? How are we doing now? This module introduces backgrounds and history of large software development and gives you motives to study SE.

2. Introduction to Requirement Engineering

Clear requirements are vital to a successful software development. In this module we will discuss about what are requirements and requirement engineering.

3. Use Case Model

Having the correct requirements, we introduce to you a powerful tool for describing them in this module.

In a course page, participant can view available modules:

Editing sdp/READ

SDP

localhost:8000/Participant/8/3/0

SDP

Home


Catalog

Back to Course

Logout

0. Administration

This module introduces basic logistics of this course.



We are: George Mitcheson georgem@cs.hku.hk Office: CB321 Tel: 2859 7068 Kevin Lam yklam2@cs.hku.hk Office: CB319 Tel: 2857 8263 Jolly Cheng mycheng@cs.hku.hk Office: CB319 Tel: 2857 8263

What we do in this course: We teach you Software Engineering.... ..but Software Engineering might not be what you expect. Why not? It's a strange kind of engineering "No Silver Bullet"

In a module page, participant can view relevant components:

Editing sdp/READ

SDP

localhost:8000/Participant/8/3/1

SDP

Home

Catalog

Back to Course

Logout

## 1. Introduction

Why are we doing software engineering? How are we doing now? This module introduces backgrounds and history of large software development and gives you motives to study SE.

How well are we doing? The Standish Chaos Report is often quoted. The Standish Group did a major survey of software development projects way back in 1994. The results were a shock to the industry at the time. The surveys have been performed at roughly 2-year intervals since then, and now yearly. The 1994 Report found: Only 16% of development projects in the USA were completed on-time, on-budget, and with all the originally planned features. 31% were cancelled before they were completed. The remaining 53%, on average: overran their original cost estimate by 89%, exceeded their original schedule by 122%, provided only 61% of the features in the original specification.

Year studied	Succeeded	Challenged	Failed
1994	16	53	31
1996	27	33	40
1998	26	46	28
2000	28	49	23
2002	34	51	15
2004	29	53	18
2006	35	46	19
2008	32	44	24
2010	37	42	21

Participant can only take one course at a time. Participant can drop a current enrollment at any time. Participant can retake a completed course.

## Instructor

Currently developing and opened courses will be displayed on the home page of instructor:

Editing sdp/READ

SDP

localhost:8000/Instructor/2

SDP

Home

Create Course

Logout

## Home

Developing

Introduction to Database Management Systems

This course studies the principles, design, administration, and implementation of database management systems. Topics include: entity-relationship model, relational model, relational algebra, database design and normalization, database query languages, indexing schemes, integrity and concurrency control.

Opened

Introduction to Software Engineering

This course introduces the fundamental principles and methodologies of software engineering. It covers the software process and methods and tools employed in the development of modern systems. The use of CASE tools and the UML are emphasized. The course includes a team-based project in which students apply their new knowledge to a full development lifecycle, including maintenance.

Quantitative risk management

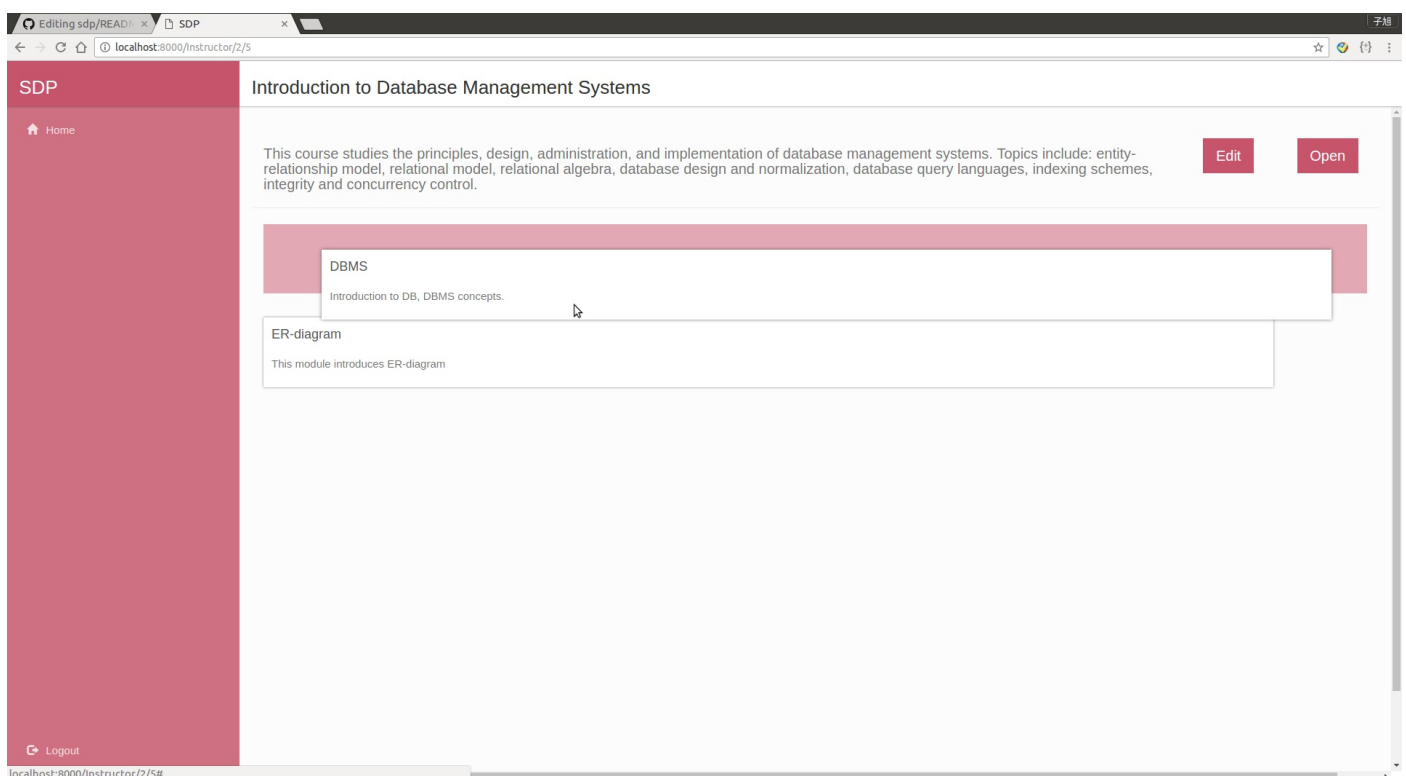
The objective of this course is to introduce concepts, techniques and framework for quantitative risk management at financial institutions. Financial firms, with their complicated list of positions in a mixture of instruments, are exposed to various sources of financial risk. This class focuses mainly on market risk, the risk of unexpected changes in prices and rates. The first part of the course introduces basic concepts in risk management and builds the toolkit for measuring risk quantitatively. The second part of the course is devoted to studying the widely accepted Value at Risk (VAR) systems, including calculations, back testing and flaws of VAR. The course also touches on other aspects of financial risk such as liquidity risk, credit risk and operational risk.

Instructor can create a course, edit its information, delete, and open a course.

In a developing course, instructor can create or delete a module, edit its information, and reorder modules.

In both developing and opened courses, instructor can add components to a module, and reorder the components.

Instructor can reorder modules and components by simply drag-and-drop:



SDP

[Home](#)
[Back to Course](#)

Logout

## 1. Introduction

How well are we doing? The Standish Chaos Report is often quoted. The Standish Group did a major survey of software development projects way back in 1994. The results were a shock to the industry at the time. The surveys have been performed at roughly 2-year intervals since then, and now yearly. The 1994 Report found: Only 16% of development projects in the USA were completed on-time, on-budget, and with all the originally planned features. 31% were cancelled before they were completed. The remaining 53%, on average: overran their original cost estimate by 89%, exceeded their original schedule by 122%, provided only 61% of the features in the original specification.

Year	Succeeded	Challenged	Failed
1994	16	53	31
1996	27	33	40
1998	26	46	28
2000	28	49	23
2002	34	51	15
2004	29	53	18
2006	35	46	19
2008	32	44	24
2010	37	42	21

[chaos-report.pdf](#)

The CHAOS reports have been questioned, but other data have pointed in a similar direction. Dynamic Markets Survey, 2007 (8 countries): 62% of projects overrun on time. 49% of projects overrun on budget. 47% of projects suffer higher than expected maintenance costs. 28% of organizations have experienced projects that do not fit

# Administrator

All users and courses will be displayed on the home page of administrator.  
Administrator can designate users as instructors:

SDP

[Home](#)

Logout

## Home

Users

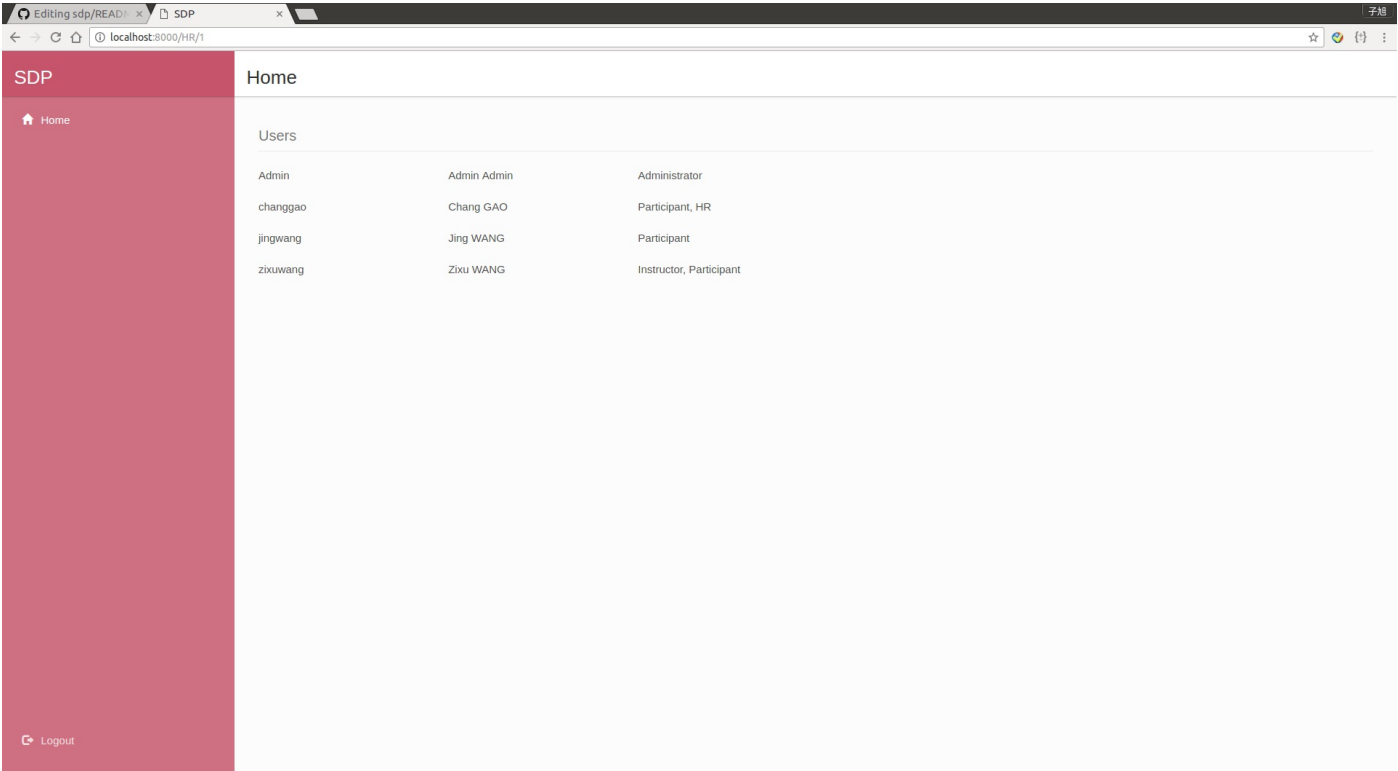
Admin	Admin Admin	Administrator	Designate as instructor
changgao	Chang GAO	Participant, HR	Designate as instructor
jingwang	Jing WANG	Participant	Designate as instructor
zixuwang	Zixu WANG	Instructor, Participant	

Courses

Introduction to Software Engineering	Zixu WANG	Information Technology	Opened
Quantitative risk management	Zixu WANG	Risk Management	Opened
Introduction to Database Management Systems	Zixu WANG	Information Technology	Developing

# HR

All users will be displayed on the home page of HR:



Other functionalities of HR are not implemented in this release.

# Known bugs and limitations

All features listed in Elaobration 1, Elaboration 2, and Construction has been implemented, as well as those listed in change requests during these iterations. There are no significant bugs in the current version.