## Automated Core Course Scheduling

# Weekly Progress Report 9

#### Customer

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#### Developer

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#### Project description:

The project is intended to develop a system which is web based, browser independent and using a GUI to help automate scheduling of core courses. The system should be the link between the lecturers and the study coordinators, such that the lecturers can choose their prefered time slots and the system gives schedule suggestions to the coordinator based on the predefined constraints and coordinator defined constraints.

## **Progress**

We have implemented 8 out of 10 of our must-have features and also finished the documents required for second iteration deliverables (Class, Sequence diagrams, data model and Use Cases already updated).

### what has been done

- UML Class diagram have been complited and uploaded.
- Sequence diagrams for 6 use cases have been completed, some use cases have been combined into a single sequence diagram as compound diagram with multiple scenarios.
- $\bullet\,$  High level Architectural diagram of the system have been designed
- The system now gives different schedule suggestions based on the lecturers preferences and a few given constraints.
- A new feature have been added to allow the coordinator block some timeslots for a given reason e.g VC courses, Professor Launch e.t.c.
- Lecturers can now see blocked timeslots with the specified reason in their view.
- Coordinator can now update a passphrase to enable other coordinators to register with the system.

### ongoing work

- Sequence Diagrams for more use cases.
- Adding more constraints to the schedulers model.
- Bugs Year of semester should match current year.
- $\bullet\,$  Implementation of modify constraint feature.
- Each function in our application is being documented using the python docstring.
- Refactoring from data structure level to algorithmic and modular level.
- Password reset functionality.

## plans for the next week

- Implement the 9th of 10 features: Coordinator should be able to activate or disable constraints and based on that, the constraint solver use only the activated constraint in calculating the possible schedules.
- Changing the preferences view based on the customer suggestion.
- Implementing a feature to enable users to change their passwords.
- Fixing the existing bugs.
- Meeting with alexander 15th Jan 2016 to discourse server architecture and technology for system deployment.

## **Problems**

Because we used pythons procedural paradigm, designing a class diagram was a bit challenging.