# Operation Theater Module

## 2014 Internship Project

This project is being considered as a potential project for 2014 Internships. If you are a potential intern and are interested in working on this project, please discuss it in detail with the mentor(s) listed here before submitting your internship proposal.

<table>
<thead>
<tr>
<th>Primary mentor</th>
<th>Harsha Kumara</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backup mentor</td>
<td>Mohammad Ullah</td>
</tr>
<tr>
<td>Assigned to</td>
<td>Lukas Breitwieser</td>
</tr>
</tbody>
</table>

## Abstract

Managing and scheduling Operation Theater (OT) activities are critical tasks in a hospital. The main objective of this module is to create a more user-friendly environment for hospitals to manage their OT activities efficiently. OT scheduling is the most critical task in managing an OT in a hospital. Scheduling always needs to deal with emergency surgery scheduling, cancellation of surgeries, etc. Having an OT module integrated with OpenMRS will gain major benefits for hospitals including efficiently managing hospital resources, optimizing theater schedules, giving an overview for assigning surgeons and nurses for each surgery efficiently and etc. Management people can analyze the efficiency of OT by past records associated with each OT and also can determine consumption and future need of resources for surgeries.

## Project Champions

Harsha Kumara  
Mohammad Ullah

## Objectives

1. Create a new module following [Creating Modules](https://github.com/openmrs) (improve the documentation if needed)
2. Apply for a repository at [https://github.com/openmrs](https://github.com/openmrs) and a JIRA project
3. Create tickets in JIRA for tasks to be completed during GSoC
4. The one of major function of the module is to enable an interface to efficiently schedule OT activities in each OT in the hospital. (Managing interfaces for scheduling activities will be critical here).  
   Scheduling needs to address changes in surgeries such as new additions, cancellations, delayed surgeries, emergencies, etc.
5. Each surgery should be associated with the following details
   - Surgery date and time.
   - Operation Theater (OT) number of ID.
   - Anesthesia type and Anesthetist Name.
   - Surgeon (Include if there is an Assistant surgeon).
   - Theater nurses associated with the surgery (If possible).
   - Mechanism to track pre and postoperative events.
   - Attach any reports associated with surgery (i.e. patient surgery chart, Operative reports - transcription).
   - Managing doctors comments regarding surgery.
   - Special drugs, instruments and materials needed for a operation.
6. Build interfaces to view daily OT activities. Also it should be necessary for view OT schedules for past and future days.
7. Create interface needed for hospital administrative people for analyze OT activities and efficiency. These interfaces may contain special needs of materials needed for upcoming surgeries and consumption of resources in each OT.

## Extra Credit

- Using Ajax based intuitive user interfaces
- Design efficient scheduler with user friendly interfaces

## Resources

- [https://groups.google.com/a/openmrs.org/forum/#!msg/implementers-archive/Vd1JgHhcf5o/r6oLS9gVWdAJ](https://groups.google.com/a/openmrs.org/forum/#!msg/implementers-archive/Vd1JgHhcf5o/r6oLS9gVWdAJ)
- [Documentation](https://groups.google.com/a/openmrs.org/forum/#!msg/implementers-archive/Vd1JgHhcf5o/r6oLS9gVWdAJ)