



## Project I Description

**Project Name:** Design of an aid management system for refugees by NGO's

**Sponsor:** N/A

### Project Overview

Unlike typical refugee situations where refugees are housed in one centralized border region, the challenge of handling refugees (Syrian, Iraqi, and other minorities) in Lebanon is currently a decentralized problem which is spread over the majority of cities and villages in the country. There are currently serious challenges in being able to account for and provide aid (food, clothing, medicine) to refugees through NGO's (charities, aid agencies public or non-governmental) in an efficient, safe and equitable way. This project is about designing a system to address this problem from the NGO perspective.

More specifically students are asked to

- Develop a system to account for and identify refugees seeking aid from NGO's
- Identify the needs of refugees and the corresponding challenges faced by NGO's and supporting governmental agencies in delivering needs
- Create a system (database and decision support tool) that will assist NGO's to manage their aid inventory, allocate the aid equitably.
- Address the logistics of the aid distribution by developing a solution for delivering the resources needed, routing, tracking and any other appropriate coordination mechanisms, such as with other NGO's
- Survey best practices used in refugee camps in Lebanon or abroad that can improve the safety of aid delivery in the most economic way

### Project Areas

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| <ul style="list-style-type: none"><li>• optimization &amp; logistics</li><li>• facility planning</li></ul> | <ul style="list-style-type: none"><li>• engineering economy</li><li>• decision analysis</li></ul> |
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### Project Deliverables

- Survey of best practices, regulations and technology/tools available for refugee aid management
- Investigation of different system design solutions and justification for the proposed one
- A report emphasizing the economic and sustainability aspects of the proposed solution and highlighting the risks associated with implementation of the proposed design.

**Team Size and Majors needed**

INE 3 students

