Design Projects Suggested by Industries
For Software Engineering

DIL (52)/81   Dated: February 9th, 2016

S. No.	Title of Projects	Name of Industries
1.	**Title** Emergency Number for Pakistan (a possible 911) **Explanation** Currently our community does not have a single standard number that can be dialed in case of an emergency like fire, ambulance or crime. Each department has a separate number that has to be dialed which is inconvenient when a person is in a state of panic. Possible solution and implementation: We aim to start with implementing a system that connects one Police Station and one fire station in an area. The students are expected to develop and implement this solution as a proof of the presented concept. They are required to complete this over the course of the year where a single number would connect and channelize calls/complaints to these departments. Once this is done the project can be taken up for large scale implementation in multiple sectors as an entrepreneurial or social venture by the students.	Mr. Berjees Shaikh Project Manager **Elaj Trust** Address :- Suite A-1, Plot # 25-C, 26th Street, Badr Commercial, Phase 5 ext, DHA Karachi E-mail: techlab@elajtrust.org Tel # (Cell): +923323382321 ## COMPANY PROFILE Elaj Trust is a social welfare trust that seeks to promote, proliferate and innovate modern healthcare and technology solutions in Pakistan. Elaj Trust brings an opportunity for the

2.	**Title** Donor recipient mobile application **Explanation** Donors especially those living outside Pakistan are often skeptical about which organization to give funding to and are concerned about the utilization of their funds. They often wish to monitor the impact of their funds and how much difference it has made in another person's life. Possible solution and implementation: A Mobile application that connects the recipient to the donor can be made for this purpose. The application will enable the donor to donate to a patient of his choice. This would also provide the donor with a dashboard that enables him/her to keep track of the treatment and health condition of the recipient in an interactive visualization format.	students at NED by providing them with a platform called Elaj Tech Lab. The idea is to encourage students to provide innovative technological solutions to support various sectors of the community such as Social, Education and Health sector. The program will enable students to work under professional mentors belonging to the fields of Engineering, Medicine, Finance, Business Development and IT.
3.	**Title** HMIS for Public Sector Hospitals **Explanation** Public Sector hospitals in Pakistan (like JPMC) still operate with data and records that are hand written in manual files. There is a need for management systems in various OPDs, Clinics and the Hospitals as a whole. Technological interventions will greatly increase efficiency of these hospitals in providing services to the masses in the community. We can assist students in selecting a process in the hospital that they wish to automate and they can work towards providing and implementing a technological solution that impacts thousands of lives each day. Currently we are in the process of automating the Diabetes OPD at JPMC and digitizing their records. The same can be done as a separate project in other wards or for automating other processes at the hospital.	

4.	**Title** **Emergency Drone for first aid** **Explanation** The aim is to program and develop a high speed drone that delivers emergency supplies to any location within minutes. The applications include sending supplies to disaster areas, AED devices to patients who have a cardiac arrest etc.	
5.	**Title** Portal to bring all NGOs together for collaboration **Explanation** There is a need for all the NGOs and Trusts to collaborate with each other, work together, share knowledge and findings for the overall betterment of the society. Mostly, organizations work separately trying to solve the same problems which results in duplication, causing wastage of precious resources. Possible solution and implementation: Creation of an online portal and a mobile app that lets NGOs put up their initiatives, call for/ share resources and collaborate with other NGOs and Trusts on similar projects.	
6.	**Title** Subsidized POS for monitoring pharmacies **Explanation** It is often difficult to find a pharmacy late at night in case medicines are not available. The aim is to develop an eco-system at the pharmacy whereby a person would register his required medicine at the pharmacy and the pharmacy would make those medicines (and possibly other essential ones) available during odd hours via a vending machine. This would cut human resource cost during odd hours and would facilitate the patient in case of an emergency need.	

7.	**Title** Health Awareness Game **Explanation** The increase in smartphone users in Pakistan can be used for advantageous purposes like spreading awareness about various diseases and conditions and how to prevent them. This can be done in an interactive manner similar to a gaming environment. The currently available applications often do not resonate with our audience hence it is essential to create applications that are developed according to the cultural needs. These applications could be deployed on phones of workers dealing with health care, and could also be developed in Urdu so that the masses are able to use them and benefit from them. Sample applications could focus on kids and teach them the importance of cleanliness and how it is directly related to their well-being.	

- **SE**
- **B.E Advisor (Final Year Projects)**

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