2016 Idea Challenge Application

1.   **Project Name: Modern Call Bell System**

2.   **Team Members:**

Name	Student E-mail	Personal E-mail	Phone Number	Current Year in	Major	Primary
	Address	Address		School		Contact
Jeremy Arzuaga	Jeremy_arzuaga@student.uml.edu	Jeremy.p.arzuaga@gmail.com	603-475-8425	1ˢᵗ year Masters	Computer Science	Email
Vivien Chow	Vivien_chow@student.uml.edu	vivien1016811@hotmail.com	978-614-5308	1ˢᵗ year Masters	Computer Science	Email
Gao Gao	Gao_gao@student.uml.edu	yvette0719@hotmail.com	978-483-8518	1ˢᵗ year Masters	Computer Science	Email

3.   **Advisor(s)/Mentor(s): (Optional)**

Name	E-mail Address	Affiliation
Guanling Chen	gchen@cs.uml.edu	Computer Science Professor

4. **Questions:**

   a. **Describe your idea/project.**
   Mobile app nursing call bell system. The patient can use the app to request pain meds, food, assistance, etc. through a tablet device. This device is also connected to patient monitors which can be viewed by the nurse/med staff using their mobile device. Based on the patient monitor readings assistance can requested immediately. The medical staff will have a mobile device that displays a prioritized list of requests.

   b. **What type of issue/problem does your idea/project address?**

   This project will assistance with patient safety, patient satisfaction, and decrease nurse call light fatigue

   c. **What is unique about the way your idea/project addresses this problem?**
   The special part of this idea is to use a mobile application to improve communication between nurses and patients. Often times, nurses do not know what the patient is calling them for. Using this system, patients can specify the service, so that medical staff may attend to the most urgent patient first.

d. **Who will benefit from your idea/project?**
Medical staff and patients

e. **Where are you in the design or development of this idea/project?**
We are still developing the idea. We have a general idea on creating a mobile application (possibly be used on tablets) for patients to call nurses by specifying what exactly do they need help with. Furthermore, we wanted to add in a platform for connecting medical devices/ equipments as sensors and send real time data to the nurses/ doctors as well. When the devices detects an emergency situation, the application should immediately alert the doctor and nurse. Hopefully this can ensure patients in getting the most effective treatments from medical staff.

f. **Will you work on pursuing your idea/project after you graduate? Yes No <u>Maybe </u>(Check boxes then pop up below questions depending what they answer on the check box)**

i. **If yes, how can/will your idea/project be sustained beyond the completion of your graduation?**

ii. **If no, why will you be unable to work on or pursue this idea/project after you graduate?**

iii. **If maybe, how might your idea/project be sustained after you graduate?**

The project can be sustained by having more medical devices incorporated with the mobile application system. Thus, doctors and nurses can know about patient's real time situation anytime and anywhere. Moreover, nurses will be able to prioritize their work which brings a more efficient working environment.

g. **Why is this idea/project important to you?**
This is important as it can be used to improve hospital services and nurses (or even doctors) work life and efficiency. In addition, patients may benefit from this system to get quick response and accurate services.