**MIS 4596**

**Project Charter**

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| ***Project Title*** | SmartCare | ***Product/Process Impacted*** | Integration of smart pill bottle tech with personal health management technology. |
| ***Start Date*** | 1/30/2018 | ***Organization/Department*** | Healthcare |
| ***Target Completion Date*** | 4/24/2018 | ***Champion*** | Tony Messina |

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|  |  | Description | | | | | | | | | | | | |  | |
| **1. Project Description** |  | Many patients with chronic illnesses have extreme difficulty managing their medications, doctors appointments, prescriptions and overall health without the aid of family and friends. When left unassisted, patients run the risk of not taking medication, taking a medication twice and overdosing, missing critical doctors appointments, and leaving crucial prescriptions unfilled. Our project looks to solve this problem by integrating smart pill bottles with a proprietary health management application that will manage all of these elements of a patient’s life seamlessly. The result will give patients the ability to manage their personal health effectively and independently, lower patient health risks significantly, and reduce the physical, mental and emotional burden of supportive family members. | | | | | | | | | | | | |  | |
| **2. Project Scope** |  | Our project will focus on five key areas and not exceed these limits:   1. Ensure patients take their pills with a schedule reminder. 2. A “check off” feature that confirms medication has been taken. 3. An alert that reminds patients their prescription is almost empty and reminds them to order a refill. 4. Clear display of pharmacy notes and special instructions for patients while taking medication. 5. A scheduling feature to remind patients of doctors appointments. | | | | | | | | | | | | |  | |
| 1. **Project Goal and Deliverables**   Deliverables Include:   1. Functioning Prototype demonstrating our project solution 2. A project deck that:   - explains the project  - Analyzes why the problem needs to be solved  - explains the business value  - acknowledges any systems and architecture impact  3. A complementary website that includes the project charter, a detailed budget spreadsheet, a data model, a process model, and a systems architecture diagram | | | | |  |  |  | | **Baseline** | **Current** | | **Goal** | |  | | |
|  | | | | |  |  | Reduce the number of patients with chronic illnesses (millions) who forget to take or mess up their medications by 17% in the first three years | | 50% of patients with chronic illnesses | 50% of patients with chronic illnesses | | Reduce to 33% | | [“half of patients with chronic illnesses mess up their medication”](http://www.nbcnews.com/id/20039597/ns/health-health_care/t/millions-skip-meds-dont-take-pills-correctly/#.WnI1iedG2M9) | | |
|  | | | | |  |  | Reduce the yearly percentage of nursing home admissions because a patient forgot to take or messed up his/her medicine by 10% within five years | | 40% new admissions into nursing homes | 40% new admissions into nursing homes | | Reduce to 30% new admissions into nursing homes | | [“it's associated with as many as 40 percent of nursing home admissions”](http://www.nbcnews.com/id/20039597/ns/health-health_care/t/millions-skip-meds-dont-take-pills-correctly/) | | |
|  | | | | |  |  | Reduce the national cost that derives from preventable hospitalizations and premature deaths (due to poor medication adherence) by $5 billion within ten years. | | $177 billion | $177 billion | | $172 billion | | [“Add preventable hospitalizations and premature death, and the report estimates that poor medication adherence could be costing the country $177 billion”](http://www.nbcnews.com/id/20039597/ns/health-health_care/t/millions-skip-meds-dont-take-pills-correctly/) | | |
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| **4. Business Results Expected** | | |  | This will project will ultimately give name brand recognition to our organization, increasing overall financial performance. The amount of downloads of our application will increase among every day users, and with time, our product may receive the endorsement and buy-in from healthcare organizations like pharmaceutical companies, pharmacies, etc. | | | | | | | | | | | |  |
| **5. Team members** | | |  | Team members include: Ian Usher, Kayla Herbst, Eric Rose, Claudine Youssef, Yu Zhou  Project Champion: Tony Messina  Project Mentor: Jeff Hamilton | | | | | | | | | | | |  |
| **6. Support Required and Risks** | | |  | Our project will require input from patients who suffer from chronic diseases or conditions to help us analyze the effectiveness of our solution. One of our team members has an aunt who could help us with this, but we may be limited to conferring with her. While she serves as the inspiration for this project and many of the features to be implemented are designed in accordance with her needs, our solution may not be as complete as it could be by surveying a larger number of patients with chronic conditions. In attempt to circumvent this obstacle, we could have team members interview healthcare professionals, or patients to ensure our solution is comprehensive and effective. | | | | | | | | | | | |  |
| **7. Customer Benefits** | | |  | Our project will give patients the ability to manage their personal healthcare effectively and independently, lower patient health risks significantly, and reduce the physical, mental and emotional burden of supportive family members. We don't currently see any negative effects that our project could have on customers, unless the application itself did not function properly and caused the patient to misuse their medication. | | | | | | | | | | | |  |
| **8. Technology Architecture** | | |  | Our application will be created using Justinmind prototyping software. All team members are moderately experienced with Justinmind. Eric Rose has the most experience and will take lead on developing our prototype. | | | | | | | | | | | |  |
| **9.Overall schedule/Work Breakdown Structure** (Key milestones & dates) | | | | | | **Responsible**  **individual** | | **Output (notes, diagrams, interviews, screen prints)** | | | **Date started if in progress**  **Or Expected completion date** | | **Date completed or date completion is expected** | | | |
| Planning | | | | | | Ian Usher | | Status reports, project charter, business case | | | 01/30/18 | | 04/12/18 | | | |
| Analysis | | | | | | Kayla Herbst | | Process model, data model, system architecture diagram | | | 01/30/18 | | 04/17/18 | | | |
| Design | | | | | | Claudine Youssef | | Design ideas/storyboard of prototype | | | Start Date: 02/26/18 | | 03/13/18 | | | |
| Implementation: Construction | | | | | | Eric Rose | | Prototype | | | Start Date: 03/05/18 | | 04/05/18 | | | |
| Implementation: Testing | | | | | | Yu Zhou | | Use case documentation | | | Start Date: 04/06/18 | | 04/12/18 | | | |
| Installation | | | | | | Herbst/Rose/  Usher/Youssef/Zhou | | Fully completed prototype, documentation, and business case | | | Start Date: 04/13/18 | | 04/19/18 | | | |