CURE Aid Tool

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**1. Project Definition (**100 - 200 words**)** – *Group responsibility*

* Why (it is needed)
* What (is the goal of the project)
* How (how will it be achieved)

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**2. Project Requirements** – *Group responsibility*  (What we expect out of the product)

* Functional
* Usability
  + User interface
  + Performance
* System
  + Hardware
  + Software
  + Database
* Security

**3. Project Specification** – *Group responsibility*

* Focus / Domain / Area
* Libraries / Frameworks / Development Environment
* Platform (Mobile, Desktop, Gaming, Etc)
* Genre (Game, Application, etc)

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**4. System – Design Perspective** – *Group responsibility*

* Identify subsystems – design point of view
  + Illustrate with class, use-case, UML, sequence ..... diagrams
  + Design choices (Optional)
* Sub-System Communication (Diagram and Description)
  + Controls
  + I/O
  + DataFlow
* Entity Relationship Model (E-R Model)
  + Example - <https://en.wikipedia.org/wiki/Entity%E2%80%93relationship_model>
* Overall operation - System Model
  + Simplified Sub-system to System interaction

**5. System – Analysis Perspective** – *Group responsibility*

* Identify subsystems – analysis point of view
* System (Tables and Description)
  + Data analysis
    - Data dictionary (Table - Name, Data Type, Description)
  + Process models
* Algorithm Analysis
  + Big - O analysis of overall System and Sub-Systems

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**6. Project Scrum Report -** *Group Responsibility*

* Product Backlog (Table / Diagram)
* Sprint Backlog (Table / Diagram)
* Burndown Chart

**7. Subsystems**

**7.1 Subsystem 1** – Name 1 - *Individual responsibility*

* Initial design and model
  + Illustrate with class, use-case, UML, sequence ..... diagrams
  + Design choices
* Data dictionary
* If refined (changed over the course of project)
  + Reason for refinement (Pro versus Con)
  + Changes from initial model
  + Refined model analysis
  + Refined design (Diagram and Description)
* Scrum Backlog (Product and Sprint - Link to Section 6)
* Coding
  + Approach (Functional, OOP)
  + Language
* User training
  + Training / User manual (needed for final report)
* Testing

**7.2 Subsystem 2** – Name 2 - *Individual responsibility*

* Initial design and model
  + Illustrate with class, use-case, UML, sequence ..... diagrams
  + Design choices
* Data dictionary
* If refined (changed over the course of project)
  + Reason for refinement (Pro versus Con)
  + Changes from initial model
  + Refined model analysis
  + Refined design (Diagram and Description)
* Scrum Backlog (Product and Sprint - Link to Section 6)
* Coding
  + Approach (Functional, OOP)
  + Language
* User training
  + Training / User manual (needed for final report)
* Testing

**7.3 Subsystem 3** – Name 3 - *Individual responsibility*

* Initial design and model
  + Illustrate with class, use-case, UML, sequence ..... diagrams
  + Design choices
* Data dictionary
* If refined (changed over the course of project)
  + Reason for refinement (Pro versus Con)
  + Changes from initial model
  + Refined model analysis
  + Refined design (Diagram and Description)
* Scrum Backlog (Product and Sprint - Link to Section 6)
* Coding
  + Approach (Functional, OOP)
  + Language
* User training
  + Training / User manual (needed for final report)
* Testing

**7.4 Subsystem 4** – Name 4 - *Individual responsibility*

* Initial design and model
  + Illustrate with class, use-case, UML, sequence ..... diagrams
  + Design choices
* Data dictionary
* If refined (changed over the course of project)
  + Reason for refinement (Pro versus Con)
  + Changes from initial model
  + Refined model analysis
  + Refined design (Diagram and Description)
* Scrum Backlog (Product and Sprint - Link to Section 6)
* Coding
  + Approach (Functional, OOP)
  + Language
* User training
  + Training / User manual (needed for final report)
* Testing

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**8. Complete System** – *Group responsibility*

* Final software/hardware product
* Source code and user manual – screenshots as needed - Technical report
  + Github Link
* Evaluation by client and instructor
* Team Member Descriptions

***This is just a guide, and use it to create/improve your report. Feel free to add sections. You are responsible for your own subsystem/s, not other members. You have to contribute to the team’s goals and objectives, and develop your subsystem/s, write your documents and slides.***

1. **Project Definition**

**Background**

According to the NC Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT), emergency department (ED) visits for opioid drug overdoses in Guilford County jumped from 47 in 2010 to 392 in 2017. While heroin overdose ED visits increased from 9 in 2010 to 291 in 2017.. GCES calls relating to opioid overdoses increased from 157 in 2013 to 1,015 in 2017, a year in which GCES conducted nearly 700 Naloxone overdose reversals. Of the 90 accidental poisoning deaths in Guilford County involving ICD-10 codes X42-X44, 43.3% involved heroin, 36.7% synthetic opioids and 21.1% other opioid drugs. GCES has reported 175 opioid-related deaths in 2017 based on local law enforcement preliminary death data.

This indicates a need for easily accessible resources and tools for substance addicts to help encourage them and help them to get the help they need. When people don’t know they have help, they usually don’t seek it. This app can help inform and open families and addicts themselves to the resources and help them to plan for outcomes and notify them of events in their area. It can also provide people with incentives to stay on track with their program(s) and goals.

**What is the CURE Aid Tool?**

The CURE Aid application is a tool which users can utilize to help themselves or someone they know with harmful substance addictions. The application will allow users to plan events and meetings with helpful organizations and care centers, make and organize gradual recovery steps for each week, and get immediate help in case of emergencies. We want this to be a one-stop useful tool to aid addicts and help them stay on track with their goals.

**Goals for the CURE Aid Project**

We will be fleshing out a whole new design template for the CURE application. We will be working closely with members of the original Android team to redesign the app from the ground up to be more interactive. Some of the planned features include:

* Location services for finding centers and resources near you.
* Auto-dial for getting help in an emergency.
* Prescreening.
* Calendar Appointments.
* Goal tracking with notification updates.
* Event updates for community outreaching.
* Achievements for meeting goals

We’re currently aiming to make this application uniform between both Android and iOS platforms. We would like to ensure it passes all privacy and store regulations so that it’s available to all who need it.

**2. Project Requirements** – *Group responsibility*

* Functional -
* Usability
  + User interface
  + Performance
* System
  + Hardware
  + Software
  + Database
* Security