Status Update

# Name: Date:

# Planning

* What have you done in the last week?
* What will you do in the coming week?
* Are you getting closer to your goals?

# Learning

* Attach any inquiry reports written for this week.
* List any outstanding questions you want to answer here.
* Show progress in online courses/tutorials (screen shots, demo code).

# Demonstrating

* Write runnable code that demonstrates part of your project and submit with your update
* Present tutorial

Inquiry Reports

# Learning objectives

1. What are the most common methods of treatment for sickle cell disease?
2. Are these methods viable for everyone?
3. What is the cost for certain methods?
4. What is the frequency of treatment for the most common treatment methods?

# Resource 1

Orah S. Platt, D. J. B., Wendell F. Rosse, Paul F. Milner, Oswaldo Castro, Martin H. Steinberg, Panpit P. Klug (1994). Mortality in Sickle Cell Disease -- Life Expectancy and Risk Factors for Early Death. *The New England Journal of Medicine* 330(23), 1639-1644.

## Mini-abstract

The researchers in the New England Journal of Medicine article conduced a 3764 SCD patient study, with ages ranging from birth to 66 years old, in order to quantify a life expectancy and calculate the median age of death. The extensive study collected data on gene maps, severity of SCD condition, and the ultimate reason for death. The results found that the average age of death for men with the homozygous condition is 42 and 48 for women. The average age of death for men with SCD hemoglobin C is 60 and 68 for females. The researchers not only wanted to find an average age of death, but gather data associated with the specific reason for death. The data collected found that 18% of the SCD patient deaths occurred because of organ failure (mostly kidney), 33% were clinically free of organ failure but dies during an acute sickle (pain) crisis, 22% dies of stroke, and the remaining died of various miscellaneous complications. An important trend noted by the study is that the researchers found that the level of infant hemoglobin levels is a large indicator of the severity of SCD that they will experience later in life.

## Relevance to project

This research provides useful data concerning the life expectancy and reasons for death concerning SCD patients. This data will be necessary in order evaluate current methods of treatment because the life expectancy provides a quantitative look at the effectiveness of the current treatment options designed to ultimately cure SCD.

# Resource 2

…

Demonstrations

# Demonstration 1

In what directory in the zip file is the code for this demo?

## To compile

What prerequisites do I need in order to run the program? Do I need to compile it and if so, how? Are there any special libraries or modules that I need to install? Where do I get them and how do I install?

## To run

How do I run the program? Command line, IDE, or what? Give me enough information so that I can run it.

## What it does

Briefly describe what the code demonstrates.

## How it relates to the project

Briefly explain how this feature/functionality will be useful to your project.

# Demonstration 2

…

Submitting the Status Update

Include this word document, one subdirectory containing archived resources/papers/webpages corresponding to your inquiry reports, and a separate subdirectory for each demonstration. For example, your directory structure might look like this:

status\_update.zip
├──resources
│ ├── resource1.pdf
│ ├── resource2.pdf
│ └── resource3.pdf
├──demo1
│ └── source.java
├──demo2
│ └── source.py
└── status\_update.docx

Submit one ZIP file on asulearn.