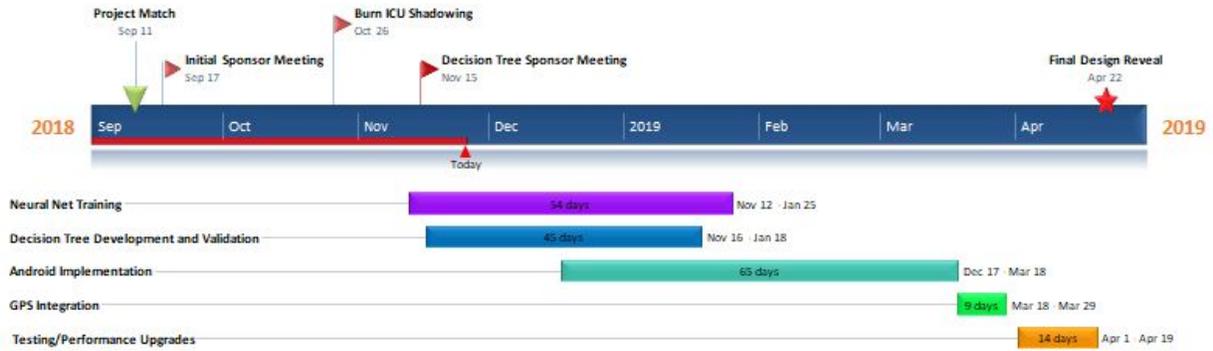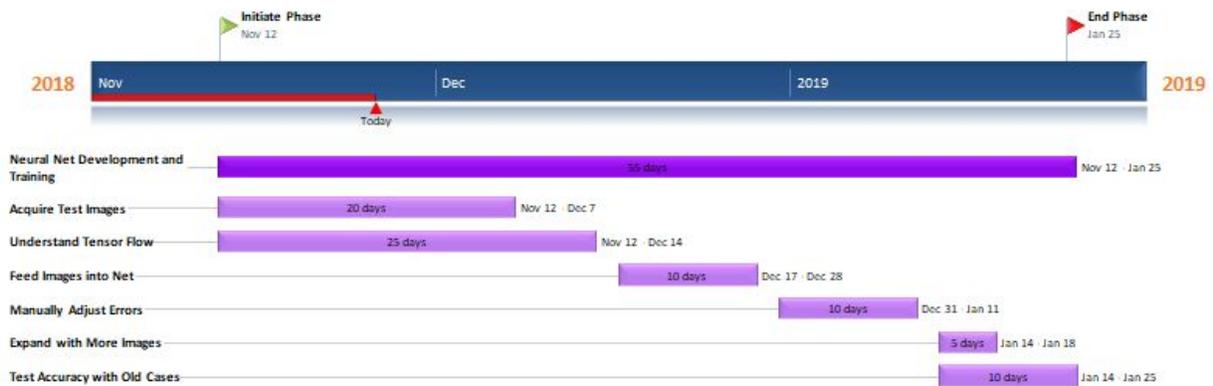Our previous goals were to obtain images to begin the development of our neural net and to begin to create the decision tree flowchart that will be used to develop the user interface of our application.

So far, our team has redeveloped our working timeline to have sub-timelines to break down each of the tasks into more manageable tasks which can be seen below:

Overall timeline:

Neural Net Timeline:

Decision Tree Flowchart Timeline:

2018 | Nov — Initiate Phase (Nov 12) — Dec — 2019 — End Phase (Jan 18) | **2019**
Today

Task	Duration	Dates
Decision Tree Flowchart Development	46 days	Nov 16 - Jan 18
Literature Review	7 days	Nov 16 - Nov 26
Determine Relevant Decision Points	10 days	Nov 26 - Dec 7
Incorporate 24-48hr Monitoring	6 days	Dec 7 - Dec 14
Research Existing Transfer Criteria	6 days	Dec 14 - Dec 21
Incorporate Transfer Decision Points	6 days	Dec 21 - Dec 28
Sponsor Review	11 days	Dec 28 - Jan 11
Finalize Flow Chart for Automation	6 days	Jan 11 - Jan 18

Android Development Timeline:

2019 | Jan — Phase Initiation (Jan 28) — Feb — Mar — Phase End (Mar 15) | **2019**

Task	Duration	Dates
Android Development	35 days	Jan 28 - Mar 15
Camera Prototype	10 days	Jan 28 - Feb 8
User Interface Development	10 days	Feb 4 - Feb 15
Neural Net Implementation	15 days	Feb 4 - Feb 22
TBSA Diagnostic Development	15 days	Feb 11 - Mar 1
Treatment/Transfer Decision Tree Implementation	25 days	Feb 11 - Mar 15

GPS Integration:

2019 | Mar — Phase Initiation (Mar 18) — Phase End (Mar 29) | **2019**

Task	Duration	Dates
GPS Integration	9 days	Mar 18 - Mar 29
Geographic Location of Burn Centers	5 days	Mar 18 - Mar 22
First Responder Location Inclusion	5 days	Mar 18 - Mar 22
Decision Tree Point for Initial Survey Location	6 days	Mar 22 - Mar 29
Transfer Center Determination	6 days	Mar 22 - Mar 29

Program Diagnostics and Improvements Timeline:

We have received images to begin working on our neural net development, training and validation. Additionally, we have a working version of our decision tree that we are validating with literature from clinical approaches. We plan to work with our project sponsor to determine typical vitals thresholds that are used for patient care in the clinic as cutoff values within our application. We have also been working on research into the transfer criteria that is used by the American Burn Association so that we can create an accurate decision point within our app that will indicate when or if a transfer is required from a trauma center based on the vitals entered in.

We have found it a bit difficult to begin to work with a neural net since none of our team members have any experience with this kind of system. This has caused us to spend more time on background information related to tensor flow so that our team can accurately develop the neural net that will be used in the photo-diagnostic portion of our application.

We are also concerned about how to work through a flow chart that has tests/vitals that are collected at different times and how we can implement a constant but automated tracking aspect for patient vitals.

We plan to work closely with our project sponsor to make sure that our flowchart accurately follows the protocols that are already used in the clinic since we do not want to disrupt existing clinician systems. Our goal is to augment the current methods by providing automation to the tracking of vitals so that transfers can be made efficiently and accurately based on the patient needs.

We also want to work closely with computer engineering professors to make sure that our software development is on track to be completed by the end of the school year.

Our team hopes to have the inputs into the android development completed shortly after we begin the next semester. Our aim is to spend a majority of next semester working on the development of our software in an android platform so that we can have as much time as possible for testing, validation and improvements.