# SnapScience Planning Phase

# Time Log

| **Team Member** | **Time (HH:MM)** | **Activities (description)** |
| --- | --- | --- |
| Kevin Diaz | 4pm - 5pm (3)  9:30am - 11pm  3pm - 5pm  10:00am - 11:30 am  9:30am - 11 am  9:00am - 10:30am  9:00am - 10:30am | 1/19, 1/20, 1/23: API & Project Idea Research  1/20: Group Meeting  1/23: Group Meeting  1/24: Documentation  1/27: Group Meeting - Updating documentation  1/28: Group Meeting - Updating System Request  1/29: Group Meeting - Finalizing System Request |
| Luis Gjuraj | 9:30am - 11:00am  3pm - 5pm  6pm- 7pm  10 am - 11:30  9:30am - 11 am  9:00am - 10 am  11 am - 1 pm | 1/20: Group Meeting  1/23: Group Meeting  1/23: API Research (Mathpix)  1/24: Documentation & File Structuring  1/27: Group Meeting - Updating documentation  1/28: Group Meeting - Updating System Request  1/29: Revising changes & Finalizing Documentation |
| Max Brinkley | 9:30am - 11:00am  3pm - 5pm  4pm-5pm  9:30am - 11 am  9:00am - 10:30am  9:00am - 10 am | 1/20: Group Meeting  1/23: Group Meeting  1/26: Existing Product Research  1/27: Group Meeting - Updating documentation  1/28: Group Meeting - Updating System Request  1/29: Group Meeting - Finalizing System Request |

# Why are we doing this Deliverable

While learning about different **methodologies** of development in class, we are abiding by the stages of the Waterfall Model for our SDLC. This method will require documentation that will be essential in self-reflection and good decision making while moving forward.

**The system request document** lays out the technical requirements, proposed system structure and market requirements that our product will fulfill. By conducting background research to compare our proposed project with other existing solutions. This deliverable would demonstrate if our software meets the 4 criteria of good software (*Maintainability, Dependability/Security, Efficiency, Acceptability*).

**The team report document** demonstrates how we completed the planning phase of the SDLC as a team. It describes in detail how each team member spent their time working on a specified task by providing a time log, while also including any possible issues that we may have had. It also describes the reasoning behind strategies and tactics used, how they were carried out and the results that they bore. Also included with this document are the names and descriptions of all the documentation created in the planning phase.

**Research** was conducted both as a whole group, as well as individually. The purpose of research was not only to find the proper tools to be implemented in our solution, but also to take a look at existing solutions and improve upon them.

# Project files for this Deliverable

| **File Name** | **Description** |
| --- | --- |
| Software Engineering Team Report - Planning.docx | Document that describes the process used for planning, the reason why our process was chosen and how each member contributed to it. |
| System Request | Describes the software project in terms of functionality, structure, requirements, market needs and system benefits. |

# Method / Process

Within the Waterfall method everything is planned out before the implementation starts, which makes it easy to know the time and cost estimates are for tasks throughout the project. We can also manage our project and make progress without any obstacles in our way.

**The Waterfall method** is a linear, sequential approach to software development that follows a specific set of phases that must be completed in a specific order. These phases are:

1. **Planning**: The system request and planning report documents are produced for the purpose of creating a high level idea for market needs, system structure and deciding the production method that will be followed.
2. **Requirements gathering**: Research is done in order to find the tools best suited to facilitate the development of the product and to set constraints and goals for the project.
3. **Design**: We will create detailed specifications for our software, including how it will function, what it will look like, etc.
4. **Implementation**: The team will write the code for the software, as well as any documentation.
5. **Testing**: Ensures that the system as a whole is working and meets the specified details in the design phase.
6. **Maintenance**: Software is written to evolve to meet the changing needs of customers.
7. **Deployment:** Finishing touches are made to the software and published

For the purposes of this class, we will be following this method through phases 1-4.

# Results

We came to an agreement about what to develop and decided in favor of multiple meetings a week, as we feel that will work best for the waterfall methodology. After a brainstorming session, we were able to narrow down possible projects to just one that we were more confident in following through and thought of as most useful.

Our group was able to productively work together by following a clear and robust process that needs the effort of everyone involved. By setting clear goals we were able to focus on the most important parts of our work quickly. By robust we mean that despite changes in planning, we were able to keep up with weekly goals set in the beginning.

We were successful in coming up with a plan for moving forward and creating a shared vision of a finished product.