0.a Team Name:

**The A-Team**

0.b Names:

**Tanay Khopey (**[**khopeytanay@vt.edu**](mailto:khopeytanay@vt.edu)**)**

**Philip Clement (philipclement@vt.edu)**

**Jonathan Hsin (jonathanhsin0107@vt.edu)**

**Camden Johnson (**[**camdenj@vt.edu**](mailto:camdenj@vt.edu)**)**

**Ahman Hale (ahmanh21@vt.edu)**

0.c Provide your preliminary project idea (or set of ideas). This is not a commitment to a project.

Using the approved idea for your group's course project, complete the following activities related to requirements analysis.

* Todo list app
* Standup Bot
* FocusBot
* RewardBot

1. Provide an example of five hypothetical non-functional requirements for this system. Be sure to include the specific type of requirement discussed in class, with each requirement coming from a unique category.

**1. Unlimited items in TODO list**

**2. Response time less than 2 seconds**

**3. Takes less than 1 TB**

**4. Readable font size and color**

**5. Must use python**

2. Provide an example of five hypothetical functional requirements for this system.

1. **Modifiable font size and color**
2. **Autosaving TODO lists**
3. **Allow adding and deleting items**
4. **Change order of items**
5. **Order items based on name or time added**

3. Think of a specific task required to complete each of the functional requirements and non-functional requirements mentioned above (10 total). Estimate the amount of effort needed to complete this task using function points (i.e., using the values here). Briefly explain your answer.

**Non-Functional**

**1. Creation of an array that can infinitely expand (1 day)**

**2. A sort function that makes the array easy to sort through (2 hours)**

**3. clears the memory of items when not using them (2 hours)**

**4. A function that sets a default text size and color (1 hour)**

**5. Use python IDE (10 minutes)**

**Functional**

**1. A function that allows the user to change the font size and color (2 days)**

**2. Create a pointer to the item so that it still exist when memory is cleared (3 days)**

**3. Create an array that supports adding and removing items (1 week)**

**4. Allows the user to edit the contents of an item so the sort function will move it (3 days)**

**5. Create a struct that keeps track of time that an item is added and other properties (1 hour)**

4. Write three user stories from the perspective of at least two different actors. Provide the acceptance criteria for these stories.

1. **John Doe, 32-year old male looking to get his life together by finding some way to organize his days. John wants an app that will plan the time he wakes up, sleeps, his meal times, and the times for his recreational soccer league games.**

**Acceptance Criteria:**

* **User can submit as many todo list items**
* **User can use group similar items together in their own tabs or boxes**

1. **Jane Doe, is a 19-year old female looking to plan her days in college as a student. Jane needs to track every single one of her homework assignments along with their due dates. The app should also send her notifications when a due date is creeping up.**

**Acceptance Criteria:**

* **User gets a notification when due date for assignment is coming up**
* **User can set due dates for individual assignments and groups of assignments**

1. **LeBron James, is a 39-year old basketball player who needs to plan out his recovery sessions after games. He needs an app that will help him keep track of where his recovery sessions are, what time they are, and after the appointments he wants to check off/remove the items from the list.**

**Acceptance Criteria:**

* **User wants to check off/remove items from the list**
* **User wants to add location and time informations for list items**
* **User wants to be able to have a clickable link that redirects him to the website of the recovery company website.**

5. Provide two examples of risk that could potentially impact this project. Explain how you would mitigate these risks if you were implementing your project as a software system.

1. **One potential risk or limitation of this project would be collaboration. For example, if there is a team that wants to utilize our to-do list, they would all need to be able to access and edit the list. To solve this issue, when implementing our project, we would allow for public access to a specific list through a generated custom link.**
2. **Another potential issue is losing the list made due to a point of failure in saving or data corruption. To mitigate this, we would create a backup for each list which can be used to restore the data.**

6. Describe which process your team would use for requirements elicitation from clients or customers, and explain why.

1. **To discover the requirements of our system, we would gather feedback from one of our primary stakeholders: college students. We would allow access to our program and ask students to plan their week or day using our to-do list. At the end of their experience, we would conduct a mini-interview collecting feedback, ideas, and potential areas of improvement in order to finetune our product.**
2. **This process will help us gain insight into building a robust product that will fit the needs of our clients and by going back to asking them about how they felt with the prototype, we can improve it and fix any problems to better fit their needs.**