Daniel Hanna
Assignment 4

1) Below is a set of detailed use case descriptions for the key use cases. It can clearly be noted that many (if not all) use cases have the same (or very similar) set of exceptions and open issues, since these are topics/situations that involve a proper system configuration as a whole. As a result, these issues can fortunately be resolved when setting up the system.

Use Case: View methods for studying
Primary Actor(s): Student/Parent/Teacher
Goal In Context: To find resources regarding different techniques to study effectively.
Preconditions: The website/database has resources contained regarding this topic, and is appropriately set up for properly displaying such information.
Trigger: The Student/Parent/Teacher decides that they would like to view different ways of studying.
Scenario:

1. The Student/Parent/Teacher navigates to the Brain Wave website. No logging in is required.
2. The system displays the welcome page. Instructions are listed for how to use the “Explore” and “Help” features of the system.
3. The Student/Parent/Teacher clicks on the “Explore” option in the menu.
4. The system displays a list of articles and guides. Articles/Guides are divided into sections via headings. The user navigates to the heading titled “Methods for studying”. Under this section, each item has a title and a small description.
5. The user clicks on any title.
6. The system displays the article/expanded details for the title that was selected.

Exceptions:

1. The Student/Parent/Teacher incorrectly navigates to the Brain Wave website (ie. by entering an invalid URL)
2. The welcome, explore, or help page are not correctly configured in the system (for example, routing error/exception encountered)
3. The article/guide that the Student/Parent/Teacher clicks on is not correctly configured in the system

Priority: High priority
When available: Attempt for availability in Prototype 1
Frequency of use: Frequent
Channel to Actor: Web browser with internet connection
Open issues:

1. What will be the best data-type/method for storing articles/article information for the website?
2. What testing method(s) will be the most effective for ensuring that issues such as routing errors or application configuration issues are not encountered during use?

Use Case: View guides for academic difficulties
Primary Actor: Student/Parent/Teacher
Goal In Context: To find resources regarding guides/suggestions as to how to handle academic challenges that often occur in an educational environment.

Preconditions: The website/database has resources contained regarding this topic, and is appropriately set up for properly displaying such information.
Trigger: The Student/Parent/Teacher decides that they would like to view ways to handle academic challenges.
Scenario:

1. The Student/Parent/Teacher navigates to the Brain Wave website. No logging in is required.
2. The system displays the welcome page. Instructions are listed for how to use the “Explore” and “Help” features of the system.
3. The Student/Parent/Teacher clicks on the “Explore” option in the menu.
4. The system displays a list of articles and guides. Articles/Guides are divided into sections via headings. The user navigates to the heading titled “Handling Academic Challenges”. Under this section, each item has a title and a small description.
5. The user clicks on any title.
6. The system displays the article/expanded details for the title that was selected.

Exceptions:

1. The Student/Parent/Teacher incorrectly navigates to the Brain Wave website (ie. by entering an invalid URL)
2. The welcome, explore, or help page are not correctly configured in the system (for example, routing error/exception encountered)
3. The article/guide that the Student/Parent/Teacher clicks on is not correctly configured in the system

Priority: High priority
When available: Attempt for availability in Prototype 1
Frequency of use: Frequent
Channel to Actor: Web browser with internet connection
Open issues:

1. What will be the best data-type/method for storing articles/article information for the website?
2. What testing method(s) will be the most effective for ensuring that issues such as routing errors or application configuration issues are not encountered during use?

Use Case: View organizational tips
Primary Actor: Student/Parent/Teacher
Goal In Context: To find resources regarding guides/suggestions as to how to be more organized in the academic environment.
Preconditions: The website/database has resources contained regarding this topic, and is appropriately set up for properly displaying such information.
Trigger: The Student/Parent/Teacher decides that they would like to view ways to be more organized.
Scenario:

1. The Student/Parent/Teacher navigates to the Brain Wave website. No logging in is required.
2. The system displays the welcome page. Instructions are listed for how to use the “Explore” and “Help” features of the system.

3. The Student/Parent/Teacher clicks on the “Explore” option in the menu.
4. The system displays a list of articles and guides. Articles/Guides are divided into sections via headings. The user navigates to the heading titled “Organization”. Under this section, each item has a title and a small description.
5. The user clicks on any title.
6. The system displays the article/expanded details for the title that was selected.

Exceptions:

1. The Student/Parent/Teacher incorrectly navigates to the Brain Wave website (ie. by entering an invalid URL)
2. The welcome, explore, or help page are not correctly configured in the system (for example, routing error/exception encountered)
3. The article/guide that the Student/Parent/Teacher clicks on is not correctly configured in the system

Priority: High priority
When available: Attempt for availability in Prototype 1
Frequency of use: Moderately Frequent
Channel to Actor: Web browser with internet connection
Open issues:

1. What will be the best data-type/method for storing articles/article information for the website?
2. What testing method(s) will be the most effective for ensuring that issues such as routing errors or application configuration issues are not encountered during use?

Use Case: Answer questions to view more relevant information
Primary Actor: Student/Parent/Teacher
Goal In Context: To have suggested resources that are relevant to the user made available, especially if the explore section is overwhelming to the user(or if the user is not sure what they want to find or where to start)
Preconditions: The website/database has a functioning form for the user to fill out and submit.
Trigger: The Student/Parent/Teacher decides that they would like to utilize the form to find a more focused set of articles/guides that could be relevant to them. The Student/Parent/Teacher *does not* wish to view all of the available articles as a group under the “Explore” section.
Scenario:

1. The Student/Parent/Teacher navigates to the Brain Wave website. No logging in is required.
2. The system displays the welcome page. Instructions are listed for how to use the “Explore” and “Help” features of the system.
3. The Student/Parent/Teacher clicks on the “Help” option in the menu.
4. The system displays a form for the user to fill out.
5. The user fills out the form and clicks on submit.
6. The system processes the users entered information, and displays a list of articles with descriptions as a result.
7. The user clicks on an article.

8. The system displays the article.

Exceptions:

1. The form is not properly configured to display on the website or to capture the user's input correctly
2. The Student/Parent/Teacher does not completely fill out the form.
3. The Student/Parent/Teacher's form entry returns to results for related articles that they might be interest in

Priority: High priority

When available: Attempt for availability in Prototype 2

Frequency of use: Frequent

Channel to Actor: Web browser with internet connection

Open issues:

1. What will be the best data-type/method for storing articles/article information for the website?
2. What testing method(s) will be the most effective for ensuring that issues such as routing errors or application configuration issues are not encountered during use?
3. What type of searching algorithm will be implemented?
4. What should happen if no results are yielded from the search?