# Future-Oriented Benchmarking through Social Media Analysis

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**Faculty Sponsor:** Dr Philip Chan, pkc@fit.edu

Client: Dr. Richard Griffith, griffith@fit.edu - Department of Psychology

**Sponsor meetings:** August 30<sup>th</sup> 2017

September 20th 2017

**Client meetings:** August 30<sup>th</sup> 2017

September 20<sup>th</sup> 2017

Task	Completion	Claudino	Harshil	To do
Investigate/Select Tools	100%	30%	70%	None
Investigate and select algorithms	100%	40%	60%	None
Select collaboration tools	100%	30%	70%	None
Demo Sentiment Analysis tool, "Hello World" demo	80%	60%	20%	Demo not demonstrating desired function. Improve/fix demo
Requirement Document	100%	0%	100%	None
Design Document	100%	80%	20%	Include GUI
Test Plan	100%	0%	100%	None

### Discussion of each accomplished task for current milestone:

**Task 1:** The proper tools, including programming language, framework, AI were investigated. We are using python as our programming language and Django as a framework. For our sentiment analysis, we are using IBM Watson.

**Task 2:** We looked up the algorithms that we will be using for our project. We researched on text classification algorithm which will be the first algorithm that will be used.

- **Task 3:** For the collaboration tools, we are using Gmail, Google Drive, Google docs and GitHub. For easy and quick communication, text messaging system is being used.
- **Task 4:** A demo for sentiment analysis has been done. A small program which takes text as input and gives out sentiment value with categorization and sentiment value.
- **Task 5:** The software requirement specification documentation has been completed. It includes all the content and standards specified on the IEEE website.
- **Task 6:** The design document has been completed. It includes all the content and standards specified on the IEEE website.
- **Task 7:** The test plan has been completed. It includes all the content and standards specified on the IEEE website.

#### **Discussion of Contribution for Each Task:**

**Claudino:** Claudino helped in investigating the required tools to develop the system as well as the collaboration tools and algorithms. He also created a demo for the Sentiment analysis program. He designed and edited the Design document.

**Harshil:** Harshil helped in investigating the required tools to develop the system as well as the collaboration tools and algorithms. He also designed and edited the software requirement document and the test plan document.

#### **Plan for the Next Milestone:**

Task	Claudino	Harshil
Implement, test and demo extraction of reviews from websites (Web Scrapping)	50%	50%
Implement, test and demo classification of reviews into nodes of hierarchy	50%	50%
Implement, test and demo Graphical Visualizations	50%	50%

## Discussion of each planned task for the next Milestone

**Task 1:** Develop and implement web scrapping feature. The web scrapping tool will be used to extract date from different social platforms.

**Task 2:** Design and implement a hierarchy based on the 7 factors discussed in the project plan and implement a text classification algorithm to distribute the data into the different respective categories.

**Task 3:** Design and implement graphical illustrations of data, representing the reviews.

# **Sponsor Feedback:**

Tools:

\* the tool used in the demo can't categorize text into categories needed by the client. Either build a classification model manually, or use machine learning to build the model.

Requirements:

- \* Program functions / Functional requirements are not specific enough.
- \* Interface requirements need not have mock-up screens, how they need to specify which screens are needed

Design:

- \* Architecture diagram has components that don't make sense, and the visualization component could be more specific.
- \* design for each requirement
- \* mock up screen for each required screen in the Requirements

Sponsor Signature:	Date:
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# **Sponsor Evaluation**

- Sponsor: detach and return this page to Dr. Chan (HC 322)
- Score (0-10) for each member: circle a score (or circle two adjacent scores for .25 or write down a real number between 0 and 10)

Claudino	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Harshil	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10

<b>Sponsor Signature:</b>	 Date:	