

Requirements Analysis Document

Team 7

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Project Manager: Dax Collison

Epic: Virtual TA Chatbot	
Story 1 - Website for user to interact with Chatbot	<p>Task 1 - Create a web page layout on the frontend using REACT.js</p> <ul style="list-style-type: none">• Description: Use React.js to build the main page layout• Hours: 10 <p>Task 2 - Create chat bot user interface</p> <ul style="list-style-type: none">• Description: Use React.js to create the interface for the user to interact with the chat bot• Hours: 20 <p>Task 3 - Set up page hosting and deploy</p> <ul style="list-style-type: none">• Description: Host the webpage using GitHub pages• Hours: 5
Story 2 - Chatbot answers user questions in a visual way	<p>Task 1 - Build UI to display graph</p> <ul style="list-style-type: none">• Description: Design/scope out how the output image will look like• Hours: 10 <p>Task 2 - Train model to display graph based on user interface</p> <ul style="list-style-type: none">• Description: Model should output a graph based on text input from user• Hours: 20-30
Story 3 - Chatbot will direct user to proper resources if it cannot answer	<p>Task 2 - Create default answer if bot is unable to recognize question</p> <ul style="list-style-type: none">• Description: Train the model to redirect unrecognizable questions to eLearning or the professor's resources• Hours: 20-30
Story 4 - Chatbot can answer Algorithm and Data Structures questions	<p>Task 1 - Create an AI/ML model on the backend that uses a dataset from Stack Overflow, Wolfram Alpha and Wikipedia</p> <ul style="list-style-type: none">• Description: Train the model using available datasets to be able to answer DS&A questions• Hours: 30-40
Story 5 - Chatbot API	<p>Task 1 - Allow chatbot to be accessed via API</p> <ul style="list-style-type: none">• Description: Create easy to use functions that allow other programs to use chatbot• Hours: 15

Backlog	
Story 3 : Chatbot will direct user to proper resources if it cannot answer	<div>Task 2: Create an input for professor to provide resources for students that the bot will direct them too</div> <ul style="list-style-type: none">• Description: Allow the professor to upload documents/resources through the webpage• Hours: 20-30