

PROJECT CHARTER	
Project Name	VisuSpeak
Date Produced	October 18, 2023
Project Goals	<p>Our team aims to create an innovative ASL-English bidirectional translation application for our capstone project.</p> <p>This application will aim to bridge the communication gap between ASL users and English speakers by enabling seamless real-time translation between ASL and English, allowing people with special accessibility needs to communicate effectively with others and gain access to essential services and information.</p>
Project Objectives	<p>Our project objective includes:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Research on AI models and datasets <input type="checkbox"/> Server Setup and Management <input type="checkbox"/> Development of front-end <input type="checkbox"/> Database Setup and Management
Project Budget	\$500
Project Sponsor	<p>Dr. Tim Maciag – ENSE 400/477 Capstone Facilitator</p> <p>Dr. Kin-Choong Yow – Mentor</p> <p>Sponsor</p>
Additional Key Project Stakeholders	
<ul style="list-style-type: none"> <input type="checkbox"/> Archisha Bhattacharya – Full Stack Developer, Server Manager and Communications Co-Manager <input type="checkbox"/> Brooklyn Coulson – Front-end Developer, Documentation and GitHub Manager <input type="checkbox"/> Jasmeet Singh – Full Stack Developer, UI/UX Designer and Communications Co-Manager 	
Overall Project Milestones	Dates
<p>Note: These milestone covers the first phase of the capstone project from September 2023 to December 2023 and are tentative and subject to change based on project progression and evolving needs.</p>	
Project Planning and Initialization	October 22, 2023
Project Prototype Development	October 20, 2023

Front-end Development	October 28, 2023
AI Model Development and Testing	October 29, 2023
Deploy Front-end Code to Production Server	November 1, 2023
Initialization and Configuring Back-end	November 10, 2023
Overall Project Risks	
Time Constraints: We will be operating within a limited timeframe, which may pose challenges in meeting project milestones and deadlines.	
Access to Sufficient ASL Data: Obtaining a substantial dataset for training our AI model in American Sign Language (ASL) translation may take much work. We must determine whether an adequate dataset exists or if we need to compile it ourselves.	
Access to Indigenous Languages/Knowledge: For translation purposes related to Indigenous languages, we need to ascertain whether a suitable pre-existing dataset is available or if we need to establish contact with an elder or knowledge keeper to generate the required data.	
Budgetary Constraints: As financially constrained university students, cost considerations may limit our ability to access necessary resources and technologies for the project.	
Interpreters: Engaging interpreters proficient in ASL, French, or Indigenous languages may present logistical and financial challenges.	
Translator Requirements: To ensure translation accuracy, the need for translators to cross-reference and validate our AI output introduces potential resource and coordination complexities.	
Learning Curve: Given our team's lack of expertise in ASL, French, or Indigenous languages, there will be a learning curve involved, which may require additional education and training on the team's part.	