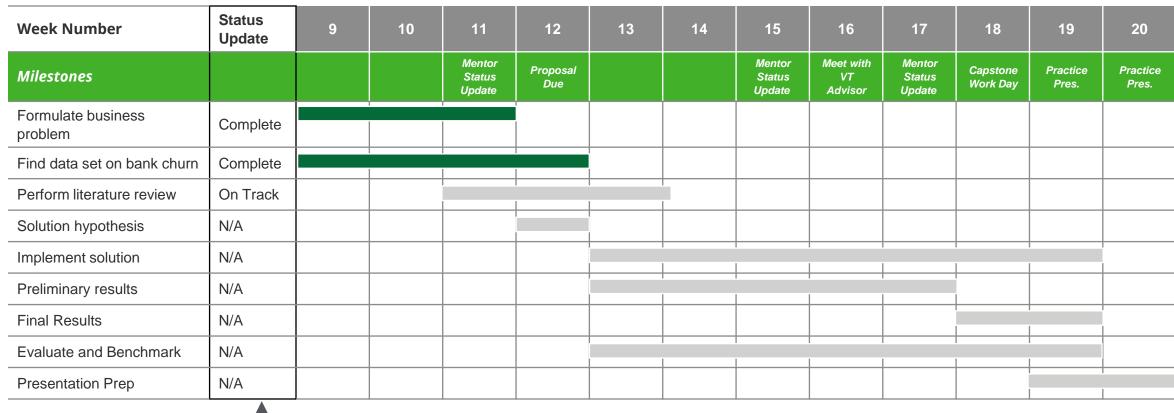
Capstone Proposal – Predicting Bank Churn

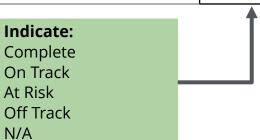
Project Name	Bank Customer Churn
Business Understanding	At what point do customers fail to become repeat customers? How can we use this information to decrease customer churn?
Client/Project Motivation	A bank in France, Germany & Spain. The motivation behind the project is to help the bank predict when a customer would churn and take preventative action to reduce the chances of it happening.
Market /Industry	Banking
State of the Art	Churn Prediction Modeling, Random Forests
Success Metrics (Evaluation)	Reduced number of churn and increase in customer retention would be our success metric. If we can reduce churn by at least 10%, I would consider that to be successful.
Scalability	Will be able to identify the type of customer that is likely to churn versus not.

Modeling Requirements		
Data Type	CSV	
Data Source	Kaggle: Bank Customer Churn Dataset (kaggle.com)	
Data Preparation Steps	Cleaning rows with empty data, or invalid data	
Data Challenges	The data is very clean and easy to use. We don't anticipate any challenges	
Modeling Techniques	Feature Engineering, Predictive Analysis	
Target Variable	Churn	
Regression or Classification problem	Classification	
Tools/Methodologies	Machine Learning Classifiers	

Project Timeline

Here is a Gantt chart with a projection of our potential schedule, as well as what we have accomplished thus far.





Status Update



As of October 6th, here is what the team has accomplished and is looking forward to from this point on.

What we did in last two weeks



Brainstorming Phase

Team produced potential ideas



Explored Data Sets

Scanned datasets related to ideas



Connected with Advisor

Met with Stephen from VT for feedback



Narrowed Down Ideas

Down to two ideas from our list

What we will accomplish in next two weeks



Data Set Selection

Finalize which data set(s) to choose relevant to business statement



Proposal

Finish working on the proposal



Performing Literature Review

Research ML and dataset cleaning techniques

Roles and Responsibilities

Kimberly Kiepek: Generating business ideas

Saniya Shahid: Coordinator, Note-taker

Rhea Vanjani: Generating business ideas

Abby Williams: Data Analysis & Model Creation

Zach Zwerling: Tech specifications, searching for project ideas