CSP 571 Project Outline

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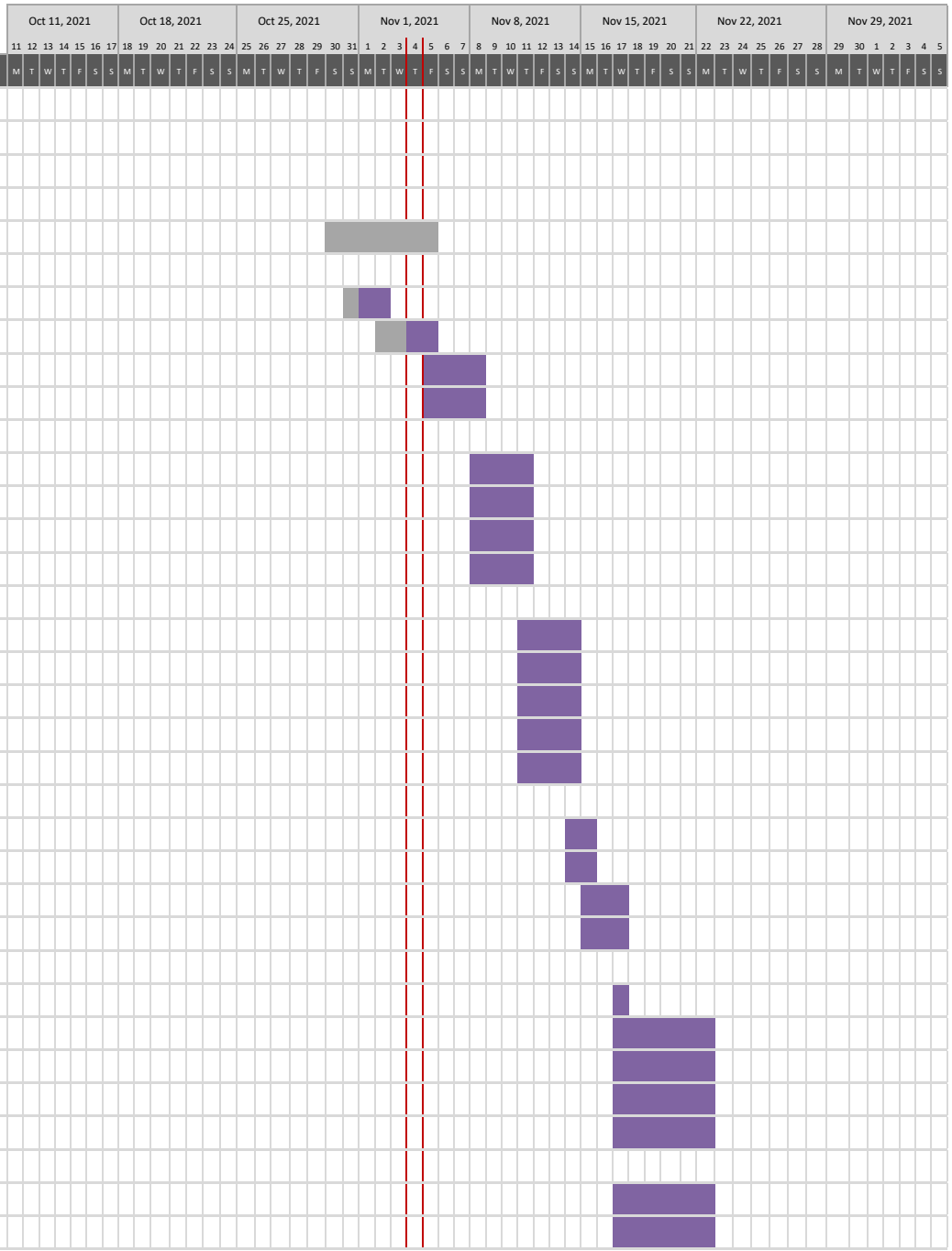
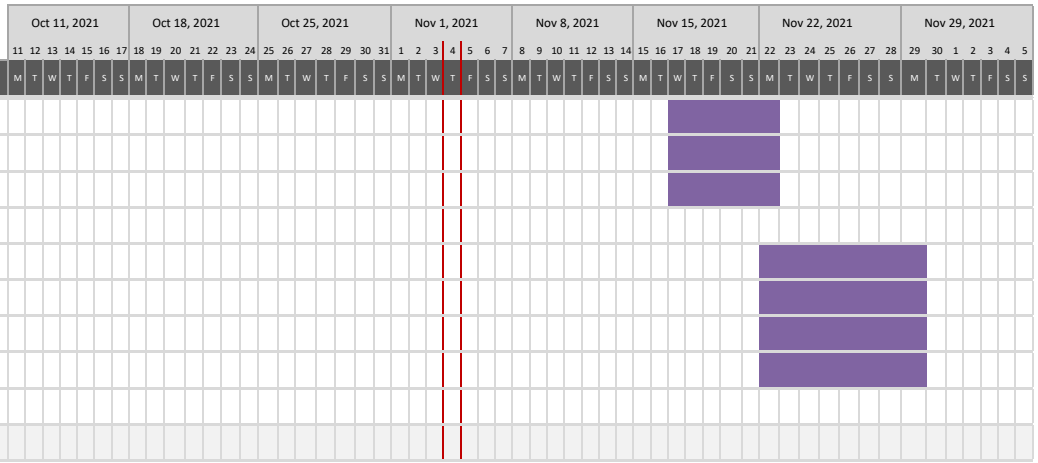
SIMPLE GANTT CHART by Vertex42.com
https://www.vertex42.com/ExcelTemplates/simple-gantt-chart.html

Project Start: Sat, 9/25/2021

Display Week: 4

TASK	ASSIGNED TO	PROGRESS	START	END
Preliminary Planning				
Select Group/Topic	Brandon and Yashwanth	100%	9/25/21	9/26/21
Data Gathering	Brandon and Yashwanth	100%	10/6/21	10/7/21
Project Outline	Brandon and Yashwanth	100%	10/8/21	10/10/21
Project Plan/Detail	Brandon and Yashwanth	100%	10/30/21	11/5/21
Data Cleaning				
Rename columns	Yashwanth	50%	10/31/21	11/2/21
Filter dataset to reduce redundant features	Yashwanth	50%	11/2/21	11/5/21
Adjust data types to accurately perform exploration	Brandon		11/5/21	11/8/21
Data Value Checking	Brandon		11/5/21	11/8/21
Data Exploration				
Calculate Summary Statistics	Brandon and Yashwanth		11/8/21	11/11/21
Discover distribution of each feature	Brandon and Yashwanth		11/8/21	11/11/21
Create simple plots to summarize data	Brandon and Yashwanth		11/8/21	11/11/21
Normalizing features	Brandon and Yashwanth		11/8/21	11/11/21
Data Visuaization				
Create visualization for total garbage collected in each state	Brandon and Yashwanth		11/11/21	11/14/21
Create visualization for garbage per population in state	Brandon and Yashwanth		11/11/21	11/14/21
Create visualization for types of garbage collected in each state	Brandon and Yashwanth		11/11/21	11/14/21
Create visualization for political party in power vs amount of garbage	Brandon and Yashwanth		11/11/21	11/14/21
Create visualization to analyze relationship between neighboring states	Brandon and Yashwanth		11/11/21	11/14/21
Data Analysis				
Plot correlation matrix for possible features	Yashwanth		11/14/21	11/15/21
PCA for dimensionality reduction	Yashwanth		11/14/21	11/15/21
Perform cross-validation splits	Brandon		11/15/21	11/17/21
Perform hypothesis testing to check assumptions about data	Brandon		11/15/21	11/17/21
Model Building				
Meeting to discuss schedule and any adjustments that need to be made	Brandon and Yashwanth		11/17/21	11/17/21
Create linear model for prediction of how much garbage on a beach	Brandon and Yashwanth		11/17/21	11/22/21
Add interaction/polynomial terms to improve accuracy of model	Yashwanth		11/17/21	11/22/21
Add Ridge/Lasso models if needed	Yashwanth		11/17/21	11/22/21
Create simple mathematical model to calculate how much labor is needed	Brandon		11/17/21	11/22/21
Model Diagnosis				
Create risidual plot for linear model to analyze non-linear relationship	Brandon and Yashwanth		11/17/21	11/22/21
Model Selection	Brandon and Yashwanth		11/17/21	11/22/21



Display Week: 4

TASK	ASSIGNED TO	PROGRESS	START	END
F-test to determine which factors are heavily used	Brandon		11/17/21	11/22/21
Analyze R^2 metric	Brandon		11/17/21	11/22/21
Analyze recall and accuracy metrics	Brandon		11/17/21	11/22/21
Final Project Wrap Up				
Model conclusions	Brandon and Yashwanth		11/22/21	11/29/21
Project critique	Brandon and Yashwanth		11/22/21	11/29/21
Write final report	Brandon and Yashwanth		11/22/21	11/29/21
Prepare for final presentation	Brandon and Yashwanth		11/22/21	11/29/21
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