

CSP 571

Project Plan and Detail

Team Members

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Jobin Joyson

Task ID	Task Description	Responsibility	Start date	Finish date	Duration (in days)	Sep				Oct			Nov																						
						15	16-20	21-22	23-25	05-15	16	17-31	01-04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23-27	28	29	30
1	Data Collection		15-Sep	25-Sep	11																														
1.1	Obtain all relevant datasets from ICRISAT	All	15-Sep	15-Sep	1																														
1.2	Initial data review	All	15-Sep	22-Sep	8																														
1.3	Select relevant datasets	All	22-Sep	25-Sep	4																														
2	Data preparation/Cleaning		5-Oct	5-Nov	32																														
2.1	Upload files to github and setup files for version control/collaboration	Santosh	5-Oct	16-Oct	12																														
2.2	Search through datasets to find any missing values and address them appropriately	Jobin	16-Oct	5-Nov	21																														
2.3	Factor categorical features and combine datasets	Jobin	5-Nov	5-Nov	1																														
3	Methodology/ Data Modelling & Analysis		6-Nov	22-Nov	17																														
3.1	Normalization of the data	Rupesh, Jobin	6-Nov	7-Nov	2																														
3.2	Split the dataset into training and testing	Rupesh	7-Nov	7-Nov	1																														
3.3	Create correlation matrix among all features	Santosh	7-Nov	9-Nov	3																														
3.4	Fit a regression on the training set with all features and target variable 'rice yield'	Santosh	9-Nov	12-Nov	4																														
3.5	Identify relevant features with p-value and correlation matrix	Santosh	12-Nov	12-Nov	1																														
3.6	Perform a regression with only relevant features	All	12-Nov	14-Nov	3																														
3.7	Compare models with MSE, RMSE, R-square with test data	All	14-Nov	18-Nov	5																														
3.8	Optimization of the model	All	18-Nov	19-Nov	2																														
	[3.8] No: Modification of the model, reset the relevant parameters		19-Nov	20-Nov	2																														
	[3.8] Yes: Forecasting the rice yield using the model		20-Nov	22-Nov	3																														
4	Conclusion and Report preparation		22-Nov	30-Nov	9																														
4.1	Develop conclusions & correlations	All	22-Nov	22-Nov	1																														
4.2	Preparation of the presentation	All	22-Nov	28-Nov	7																														
4.3	Final report preparation	All	28-Nov	30-Nov	3																														