Model Development Phase Template

Date	7 July 2024
Team ID	SWTID1720116242
Project Title	Predicting Compressive Strength Of Concrete Using Machine Learning
Maximum Marks	5 Marks

Feature Selection Report Template

In the upcoming update, every feature will be accompanied by a concise description. Users will have the opportunity to specify their selection of each feature, offering rationale behind their decisions. This structured approach aims to streamline the decision-making process and promote transparency in feature selection, ensuring that chosen features align closely with the objectives and requirements of the task at hand.

Feature	Description	Selected (Yes/No)	Reasoning
Cement (kg in a m^3 mixture)	Amount of cement in the mix	Yes	Critical for compressive strength of concrete
Blast Furnace Slag (kg in a m^3 mixture)	Amount of blast furnace slag in the mix	Yes	Used as partial cement replacement, affects strength..
Fly Ash (kg in a m^3 mixture)	Amount of fly ash in the mix	Yes	Enhances workability and contributes to strength.

Water (kg in a m^3 mixture)	Amount of water in the mix	Yes	Essential for cement hydration and strength development.
Superplasticizer (kg in a m^3 mixture)	Amount of superplasticizer in the mix	Yes	Improves workability and influences concrete strength.
Coarse Aggregate (kg in a m^3 mixture)	Amount of coarse aggregate in the mix	Yes	Provides compressive strength and bulk to the mix.
Fine Aggregate (kg in a m^3 mixture)	Amount of fine aggregate in the mix	Yes	Affects workability and contributes to concrete strength.
Age (days)	Age of the concrete sample	Yes	Concrete strength increases with age
Curing Conditions	Environmental conditions during curing	Yes	Curing impacts hydration and final strength of concrete.

Mix Proportions	Ratios of the different components in the mix	Yes	Crucial for balancing materials and predictir