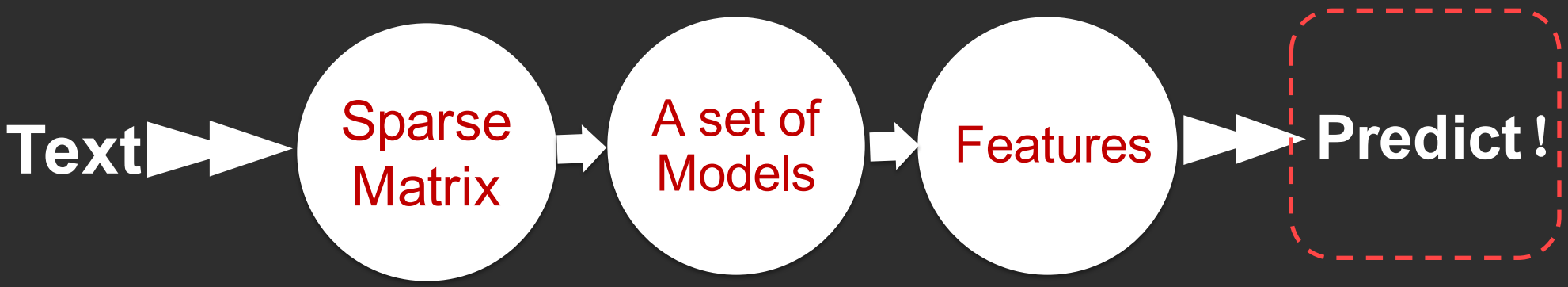
Ratings Prediction on Yelp Data

Presentation II

Group 4

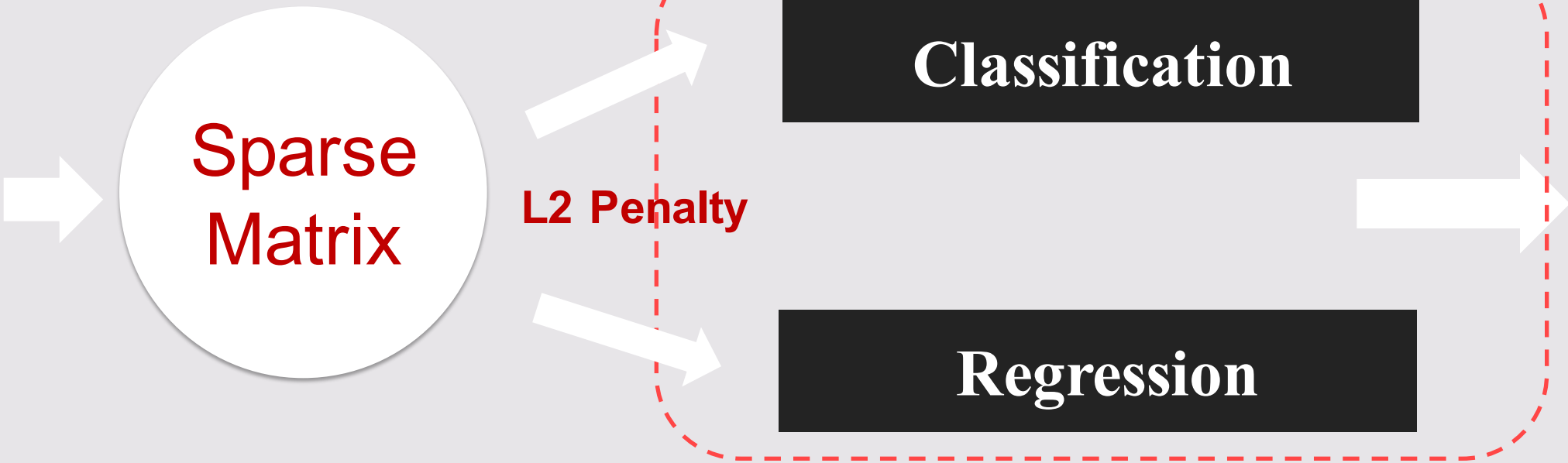
Workflow



RMSE=0.62

Group 4

Models



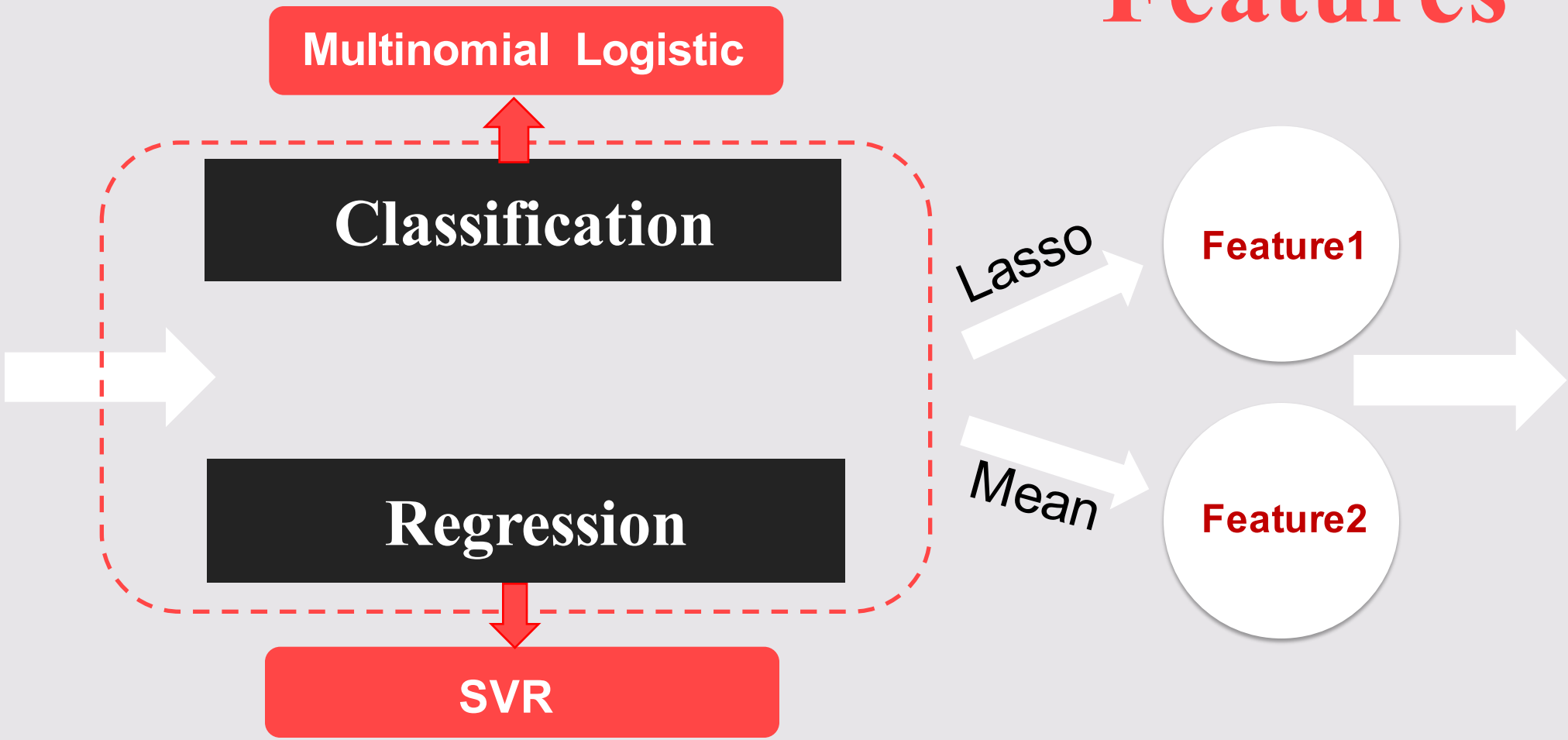
Multinomial Logistic Classification

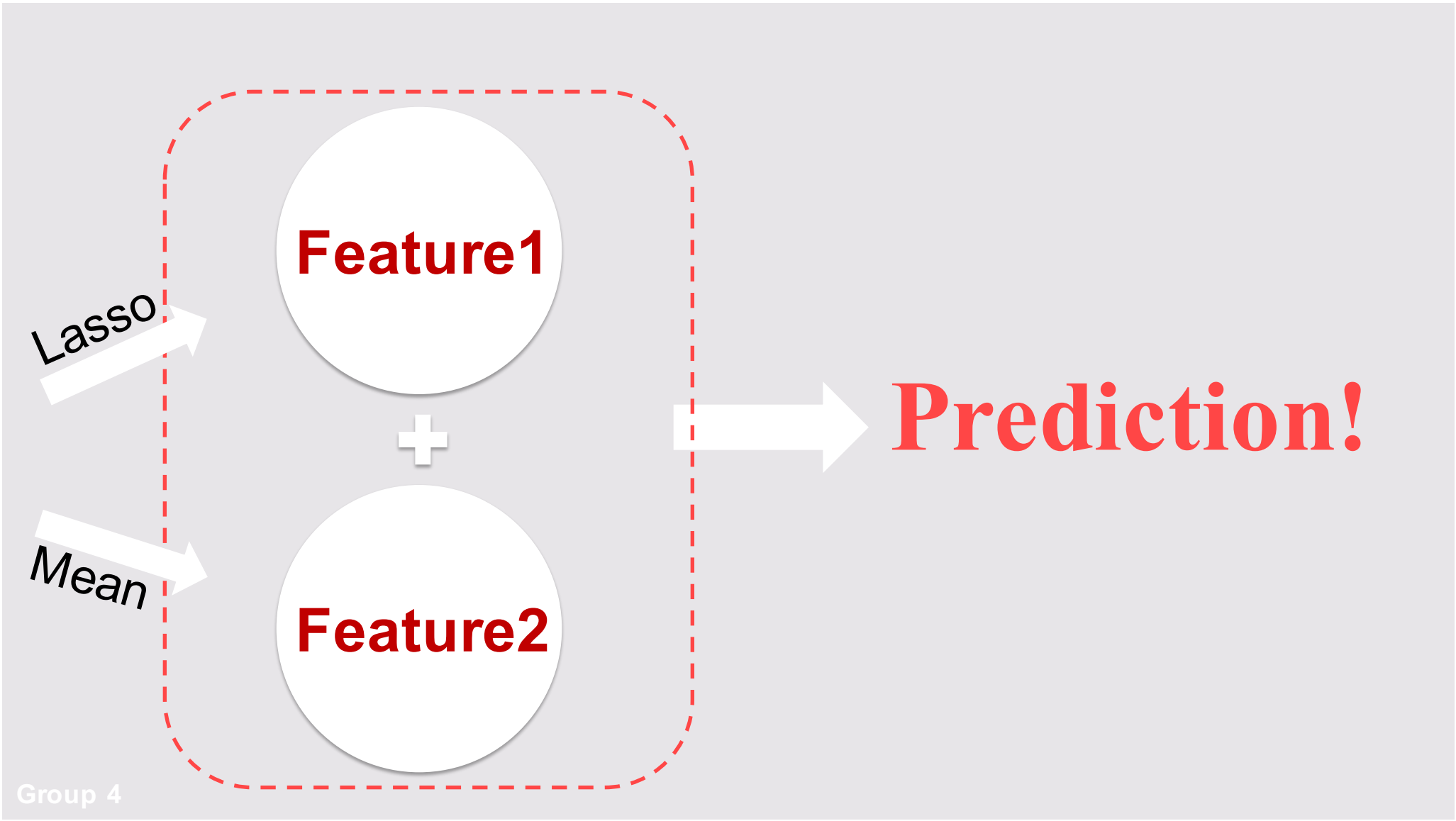
$$P(y = j|\mathbf{x}) = \frac{e^{\mathbf{x}^\top \mathbf{w}_j}}{\sum_{k=1}^{K} e^{\mathbf{x}^\top \mathbf{w}_k}}$$

Support Vector Regression

$$L_\varepsilon(y, f(\mathbf{x}, \omega)) = \max\left(\left| y - f(\mathbf{x}, \omega) \right| - \varepsilon, 0\right)$$

Features


Multinomial Logistic
Classification
Regression
SVR
Lasso
Mean
Feature1
Feature2


Lasso
Mean
Feature1
+
Feature2
Prediction!

THANKS

Presentation II