

CarAd – structure of components

Overview diagram

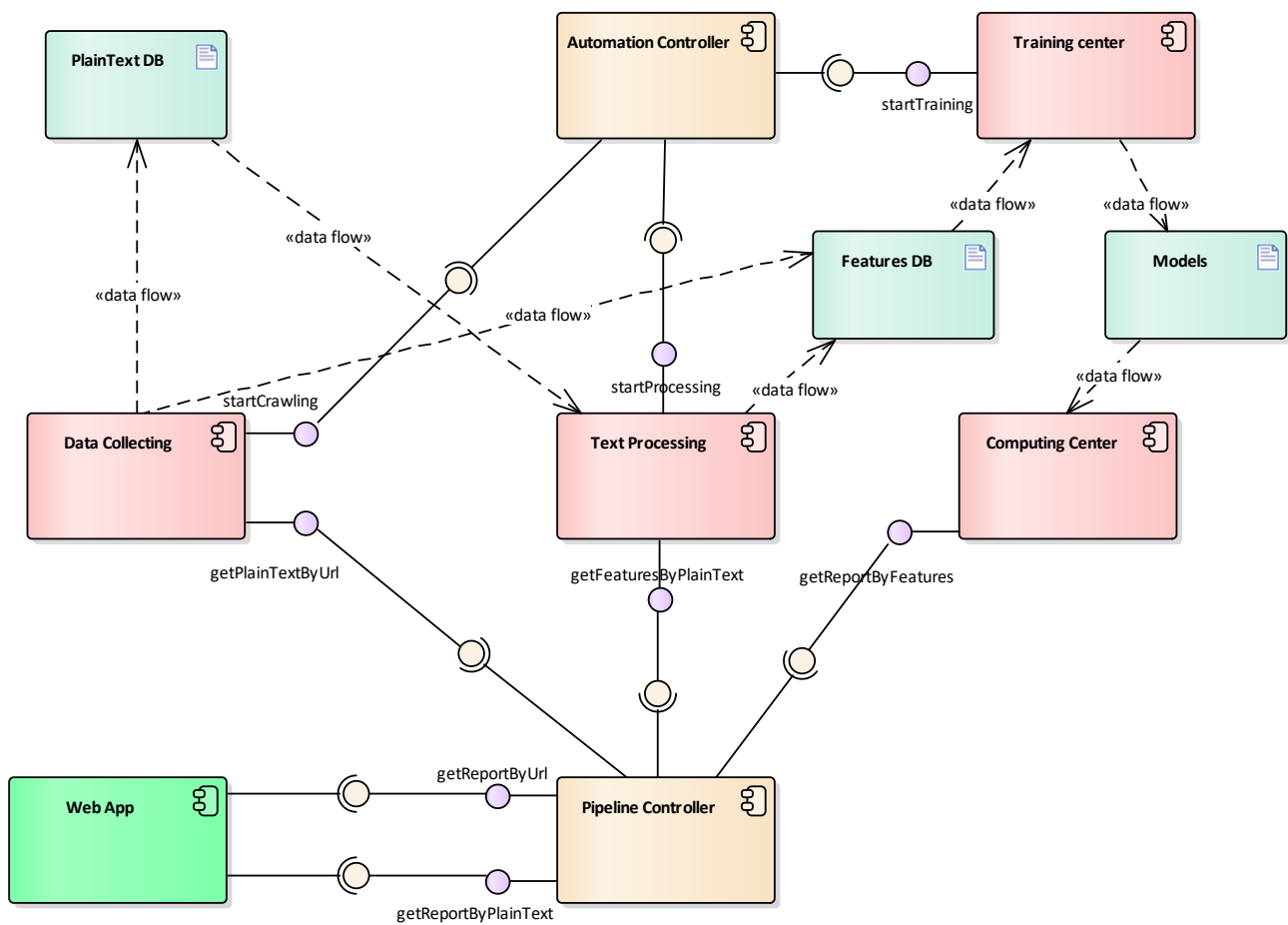


Figure 1: Overview

User interaction diagram

Web App client communicates with the **Pipeline Controller** service, sends ad - URL or PlainText, and receives a price prediction report.

Pipeline Controller uses the services:

- **Data Collecting** to get an advertisement from the web
- **Text Processing** to process ad text
- **Computing Center** for price prediction and report creation.

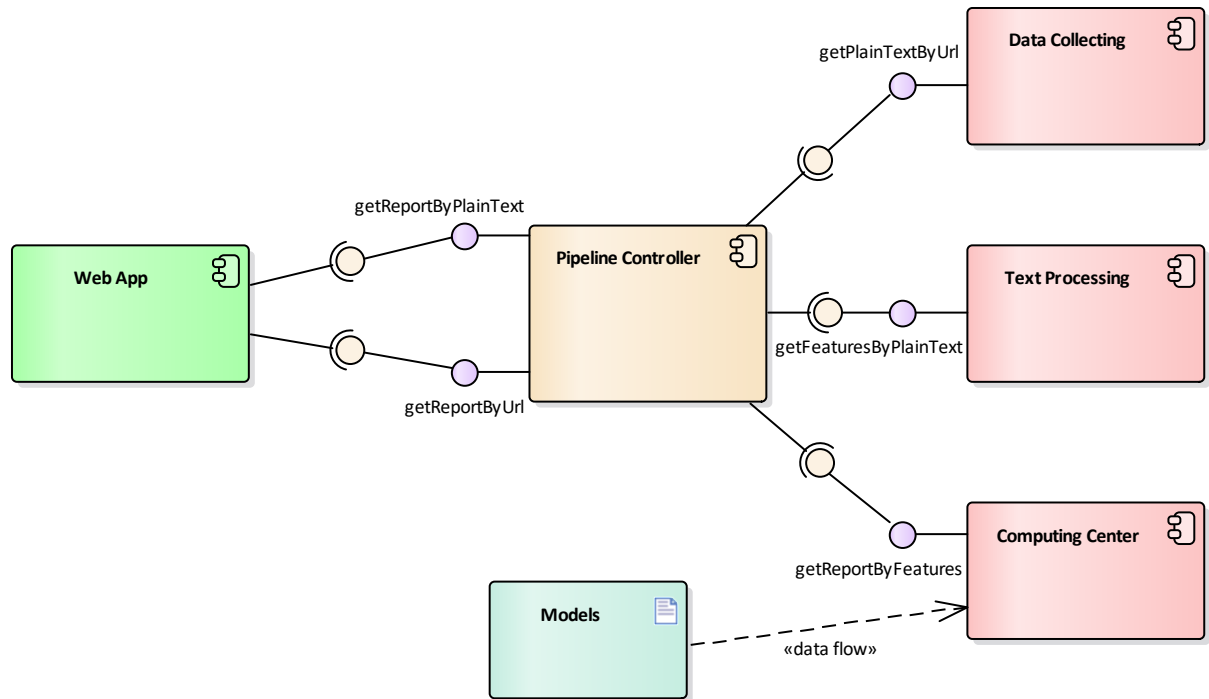


Figure 2: User interaction

1 User interaction - Url diagram

Price prediction based on URL.

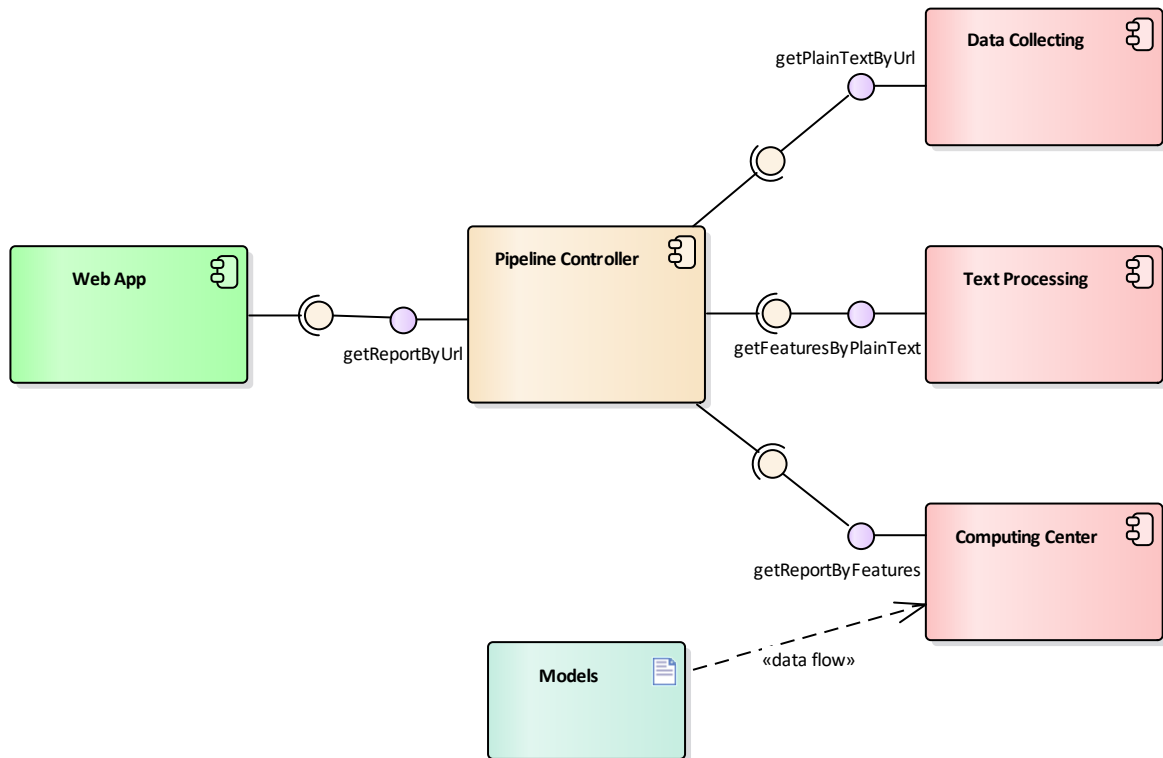


Figure 3: 1 User interaction - Url

2 User interaction - PlainText diagram

Price prediction based on PlainText.

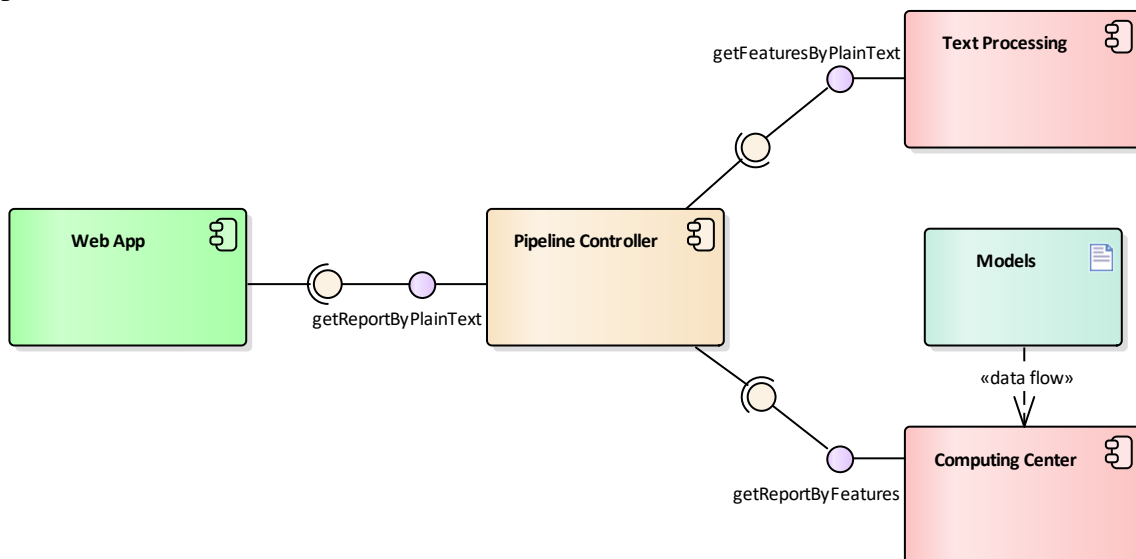


Figure 4: 2 User interaction - PlainText

Data collection diagram

Automation Controller service calls **Data Collecting** service interface at a scheduled time and starts crawling and saving ads.

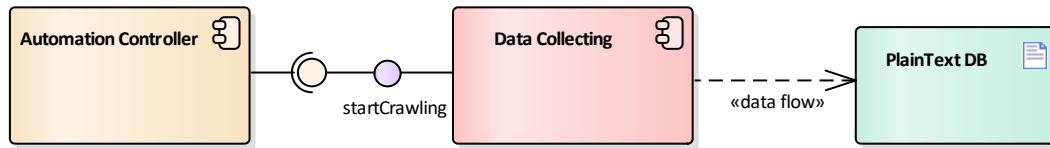


Figure 5: Data collection

Data processing diagram

Automation Controller service calls **Text Processing** interface at a scheduled time and starts the extraction and saving of features.

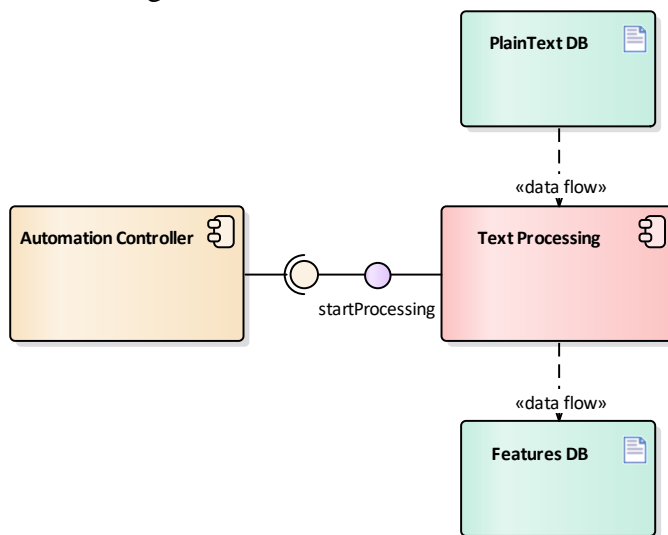


Figure 6: Data processing

Model training diagram

Automation Controller service calls the **Training Center** interface at a scheduled time and starts training and saving models.

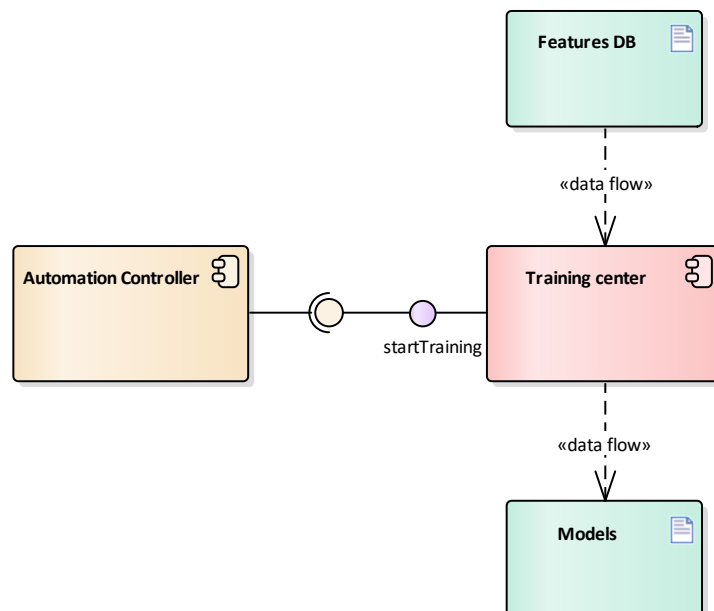


Figure 7: Model training