

Conceptual architecture

To identify the key concepts let's go back to the requirements.

- The system will scrape historical data.
- The system will insert the data in a database.
- The system will enable training of the AI model.
- The system will allow the admin to configure the AI model
- The system will offer user registration.
- The system will offer user login.
- The system will offer authentication and session management.
- The system will predict the stock market.
- The system will log system activities.
- The system will offer to update the user information.

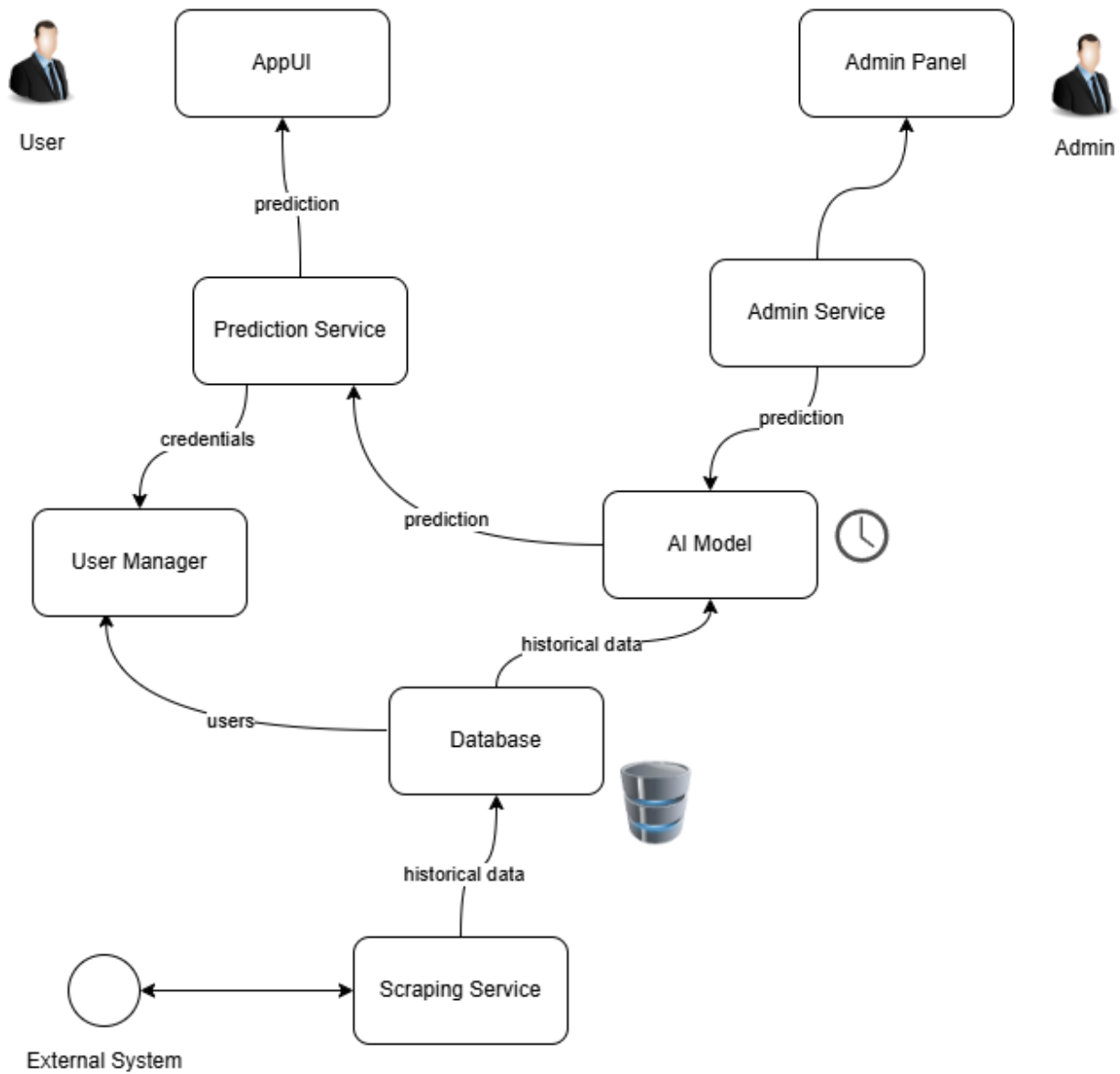
Data	Function	Stakeholder	External System	Abstract concept
Historical data	Scrape	Admin	Stock market	AI model
Database	Insert	User		Session management
Credentials	Training			
Prediction	Configure			
	Registration			
	Login			
	Predict			
	Log			
	Update			

Now that we have the key concepts, we can choose the components and connectors.

The responsibilities for each component are:

1. AppUI
 - 1.1. DisplayPrediction
 - 1.2. DisplayChart
2. Prediction Service
 - 2.1. StartPrediction
3. User Manager
 - 3.1. RegisterUser
 - 3.2. LoginUser
 - 3.3. UpdateUserInformation
4. Admin Panel
 - 4.1. ConfigureModel
5. Admin Service
 - 5.1. ConfigureModel

- 5.2.LogActivity
- 6. AI Model
 - 6.1.PredictStockMarket
- 7. Scraping Service
 - 7.1.GetHistoricalData
 - 7.2.InsertHistoricalData



Now we can explore the behavior with a use-case map for the scenario: GetPrediction.

