# Functional Modeling

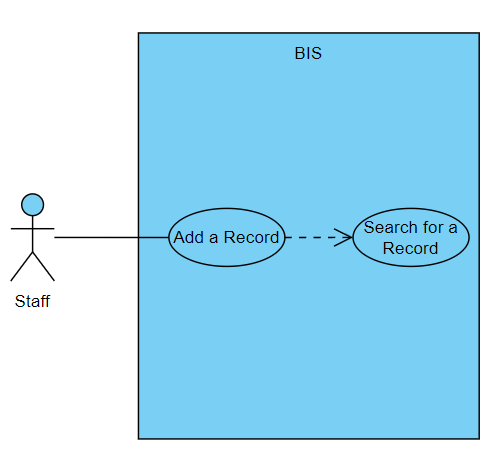
This section of the document will model the functional requirements of the Book Inventory System (BIS) based on the following use cases:

* Adding a Record
* Removing a Record
* Adjusting a Record
* Listing All Records of a Given Type
* Searching for a Record

## Adding a Record

Functional Requirement Modeled: FR1 – Manipulate a Record

The following use case diagram displays the process of adding a record to the BIS. The four subsections following that breakdown the general procedure of adding each of the four types of records supported by the product: books, customers, employees, and orders.



### Adding a Book Record

This procedure describes the creation of a new book record.

### Adding a Customer Record

This procedure describes the creation of a new customer record.

### Adding an Employee Record

This procedure describes the creation of a new employee record.

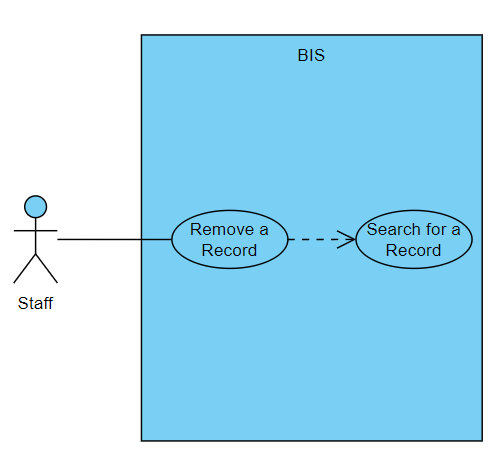
### Adding an Order Record

This procedure describes the creation of a new customer record.

## Removing a Record

Functional Requirement Modeled: FR1 – Manipulate a Record

The following use case diagram displays the process of removing a record from the BIS. The four subsections following that breakdown the general procedure of removing each of the four types of records supported by the product: books, customers, employees, and orders.



### Removing a Book Record

This procedure describes the removal of an existing book record from the system.

### Removing a Customer Record

This procedure describes the removal of an existing customer record from the system.

### Removing an Employee Record

This procedure describes the removal of an existing employee record from the system.

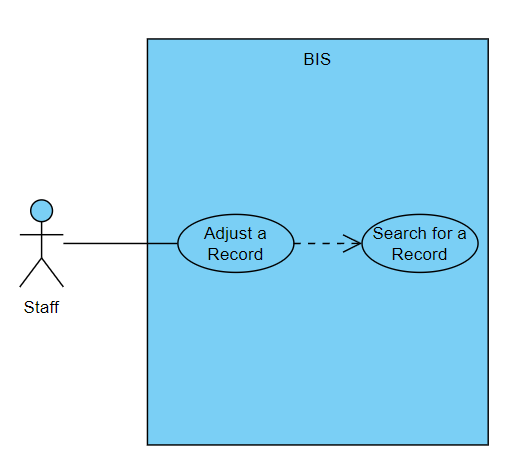
### Removing an Order Record

This procedure describes the removal of an existing order record from the system.

## Adjusting a Record

Functional Requirement Modeled: FR1 – Manipulate a Record

The following use case diagram displays the process of adjusting a record already in the BIS. The four subsections following that breakdown the general procedure of adjusting each of the four types of records supported by the product: books, customers, employees, and orders.



### Adjusting a Book Record

This procedure describes the adjustment of any property of any existing book record. The most frequent application of this use case involves adjusting the stock quantity or price of a book.

### Adjusting a Customer Record

This procedure describes the adjustment of any property of any existing customer record.

### Adjusting an Employee Record

This procedure describes the adjustment of any property of any existing employee record.

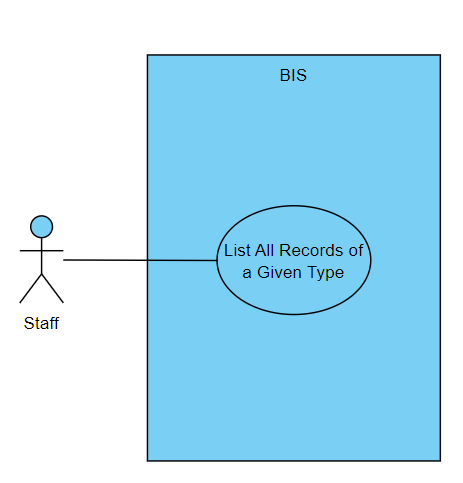
### Adjusting an Order Record

This procedure describes the adjustment of any property of any existing order record.

## Listing All Records of a Given Type

Functional Requirement Modeled: FR2 – Print List of Records

This use case analyzes the generation of a report listing all records of a single type.



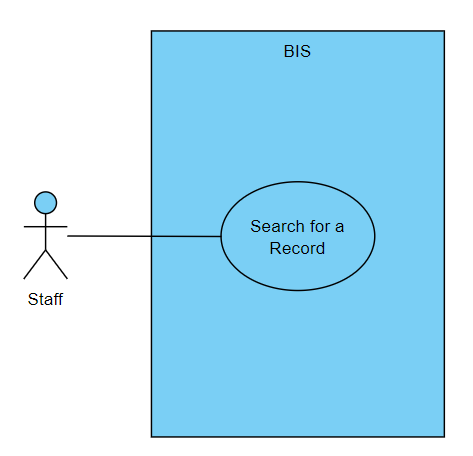
## Searching for a Record

Functional Requirement Modeled: FR3 – Search for a Record

The following use case diagram displays the process of searching for a record in the BIS. The four subsections following that breakdown the general procedure of searching for each of the four types of records supported by the product: books, customers, employees, and orders.

### Searching for a Book Record

This procedure describes the process of searching for a book record with information such as the ISBN, title, or author.



### Searching for a Customer Record

This procedure describes the process of searching for a customer record by Member Number.

### Searching for an Employee Record

This procedure describes the process of searching for an employee record by Employee Number.

### Searching for an Order Record

This procedure describes the process of searching for an order record by Order Number.