**Business rules** and **business logic** are closely related concepts, but they have distinct roles in a software system. Here’s how they differ:

**1. Business Rules:**

* **Definition:** Business rules are explicit statements that define or constrain some aspect of a business. They are the specific conditions, guidelines, and constraints that govern how a business operates. These rules are often defined by business stakeholders and are typically independent of the software system.
* **Examples:**
  + "A customer must be at least 18 years old to register for an account."
  + "A discount is applied only if the purchase amount exceeds $100."
  + "Invoices must be generated at the end of every month."
* **Characteristics:**
  + **Declarative:** They state what should or should not happen, but not how it should be implemented.
  + **Domain-Specific:** They are specific to the business domain and reflect the company’s policies, regulations, or procedures.
  + **Often Managed by Non-Technical Stakeholders:** Business rules can be documented, modified, and managed by business analysts or other non-technical stakeholders.

**2. Business Logic:**

* **Definition:** Business logic refers to the part of the software that implements the business rules and the operations required to fulfill the business requirements. It is the code or algorithms that process data and enforce the business rules within the software application.
* **Examples:**
  + A function that checks if a customer is 18 years old before allowing them to register.
  + Code that calculates the total purchase amount and applies a discount if the criteria are met.
  + A process that generates invoices at the end of the month and sends them to customers.
* **Characteristics:**
  + **Procedural:** It defines how business rules are enforced and how data is processed in the system.
  + **Integrated into the System:** Business logic is implemented within the application code, typically in the business layer of the architecture.
  + **Technical Implementation:** It is often handled by developers and may include complex processing, data manipulation, and interaction with other system components.

**Summary of Differences:**

* **Business Rules** are the *what*—they define the conditions, constraints, and guidelines that a business follows. They are abstract and often expressed in natural language.
* **Business Logic** is the *how*—it is the implementation of those business rules within the software system. It includes the code and processes that enforce and execute the rules.

**Example to Illustrate the Difference:**

**Scenario: Online Retail Store**

* **Business Rule:** "Free shipping is available for orders over $50."
  + This rule states the condition under which free shipping should be provided.
* **Business Logic:** A function in the software checks the total order amount and applies free shipping if the amount exceeds $50. The logic includes calculating the order total, comparing it against the threshold, and then determining the appropriate shipping cost.

In this example, the business rule is a clear, simple statement of what the business wants to happen, while the business logic is the code that makes it happen within the application.