**Overall Requirements for AIMS: An Internet Media Store**

The overall requirements for the AIMS software encompass both functional and non-functional aspects, ensuring that the system meets the needs of all stakeholders, including administrators, product managers, and customers. These requirements are derived from the problem statement and are organized into categories for clarity.

**1. Functional Requirements**

**1.1 User Roles and Permissions**

* **Administrators**:
  + Create, view, update, and delete user accounts.
  + Reset user passwords and block/unblock users.
  + Assign roles (e.g., administrator, product manager) to users.
  + Receive email notifications for administrative actions.
* **Product Managers**:
  + Add, view, edit, and delete products.
  + Add or edit one product at a time; delete up to 10 products at once.
  + Cannot delete or update more than 30 products in a day.
  + Add an unlimited number of products daily.
  + Update product prices up to twice a day, ensuring prices remain within 30% to 150% of the product value.
* **Customers**:
  + Browse and search for products without logging in.
  + View product details, add products to the cart, and place orders.
  + Provide delivery and payment information during checkout.
  + Receive email notifications for order and payment confirmation.
  + Cancel orders before approval and receive refunds.

**1.2 Product Management**

* **Product Information**:
  + Required fields: Title, category, value, current price (excluding 10% VAT).
  + Additional fields based on product type:
    - **Books**: Authors, cover type, publisher, publication date, optional fields (pages, language, genre).
    - **CDs/LPs**: Artists, record label, tracklist, genre, optional fields (release date).
    - **DVDs**: Disc type, director, runtime, studio, language, subtitles, optional fields (release date, genre).
  + **Physical Product Attributes**: Barcode, product description, quantity, warehouse entry date, dimensions, weight.
* **Product History**:
  + Store history of product additions, edits, and deletions.
  + Notify product managers of invalid operations (e.g., incorrect date format).

**1.3 Order Management**

* **Cart Management**:
  + Customers can add, remove, or update quantities of products in the cart.
  + Notify customers if inventory is insufficient.
  + Display cart information, including total price (excluding VAT), product list, and delivery fees.
* **Order Placement**:
  + Customers provide delivery and payment information.
  + Software checks inventory before placing an order.
  + Customers can update the cart if inventory is insufficient.
* **Rush Order Delivery**:
  + Available for addresses within Hanoi’s inner city.
  + Delivery within 2 hours.
  + Additional fee of 10,000 VND per rush order item.
* **Shipping Fees**:
  + Free shipping for orders over 100,000 VND (up to 25,000 VND, excluding rush orders).
  + Shipping fees based on the weight of the heaviest item.
  + Inner city Hanoi/Ho Chi Minh City: 22,000 VND for the first 3kg.
  + Other locations in Vietnam: 30,000 VND for the first 0.5kg, plus 2,500 VND for each additional 0.5kg.

**1.4 Payment Processing**

* **Payment Method**:
  + Credit card payment via VNPay.
  + Future support for additional payment methods.
* **Invoice Information**:
  + Display and temporarily save invoice details, including product list, quantities, prices, total price (excluding VAT), total price (including VAT), delivery fee, and total amount.
* **Payment Confirmation**:
  + Display order and transaction information after successful payment.
  + Send invoice and payment transaction information to the customer’s email.

**1.5 Order Approval and Cancellation**

* **Pending Orders**:
  + Product managers can view, approve, or reject pending orders.
  + Orders are rejected if inventory is insufficient.
* **Order Cancellation**:
  + Customers can cancel orders before approval.
  + Full refund to the payment method via VNPay.

**2. Non-Functional Requirements**

**2.1 Performance**

* **Response Time**:
  + Maximum response time of 2 seconds under normal conditions, 5 seconds during peak hours.
* **Scalability**:
  + Support up to 1,000 simultaneous users without significant performance degradation.
* **Uptime**:
  + Operate continuously for 300 hours without failure.
  + Resume normal operation within 1 hour after an incident.

**2.2 Security**

* **Authentication and Authorization**:
  + Secure login mechanisms for administrators and product managers.
  + Role-based access control (RBAC) to restrict unauthorized actions.
* **Data Encryption**:
  + Encrypt sensitive data (e.g., passwords, payment information) in transit and at rest.
* **Audit Logs**:
  + Maintain detailed logs of all critical operations (e.g., product updates, user management).

**2.3 Maintainability**

* **Code Quality**:
  + Follow coding standards and best practices.
  + Conduct regular code reviews.
* **Documentation**:
  + Provide comprehensive documentation for the system.
* **Testing**:
  + Implement automated unit tests, integration tests, and end-to-end tests.

**2.5 Compliance**

* **Tax Compliance**:
  + Ensure VAT (10%) is correctly calculated and displayed on invoices.

**3. Future Enhancements**

* **Product Expansion**:
  + Support digital media products (e.g., eBooks, streaming services).
* **Geographic Expansion**:
  + Support multiple currencies for international customers.
* **Feature Enhancements**:
  + Implement wishlists and gift cards.

**4. Operational Requirements**

* **Monitoring and Alerts**:
  + Implement real-time monitoring of system performance and uptime.
* **Disaster Recovery**:
  + Develop a disaster recovery plan to ensure business continuity.
* **Backup and Data Retention**:
  + Implement automated daily backups and retain data for at least 7 years.

These overall requirements provide a comprehensive framework for the development, deployment, and operation of the AIMS software, ensuring it meets the needs of all stakeholders while adhering to industry standards and best practices.