**Financial management system** using Spring Web with Lombok and verification dependencies. This system manages users information and financial accounts for them.

Create: FinanceModel ,User Model and FinanceController.

**User Model has:** id,userName,email,password,address,phoneNumber,dateofbirth.

**Finance Model has:** id,accountBalance,currency,accountType,creationDate, bankaccountnumber, creditcardNumber.

- ld:
- Cannot be null.
- length must be more than 2 characters.
- @NotNull(message = "id cant be null")
- @Size(min = 3,message = "length must be more than 2 characters")
  private String id;
  - Username:
  - Cannot be null.
  - Length must be between 5 and 20 characters.
- @NotNull(message = "Username cannot be null")
- @Size(min = 5, max = 20, message = "Username length must be between 5 and 20 characters")
  private String username;
  - Password:
  - Cannot be null.
  - Should be at least 8 characters long.
  - Must include a combination of uppercase and lowercase letters, numbers, and special characters.
- @NotNull(message = "Password cannot be null")
- @Size(min = 8, message = "Password length must be at least 8 characters")
- @Pattern(regexp = " $^(?=.*[a-z])(?=.*[A-Z])(?=.*[@$!%*?&])[A-Za-z\d@$!%*?&]+$", message = "Password must contain at least one uppercase letter, one lowercase letter, one number, and one special character")$

private String password;

- Email:
- Cannot be null.
- Must be in a valid email format.
- @NotNull(message = "Email address cannot be null")
- @Email

private String email;

- Date of Birth:
- Must be provided.
- Should be in the past.
- @NotNull(message = "Date of birth cannot be null")
- @Past(message = "Date of birth must be in the past")

private Date dateOfBirth;

- Address:
- Must be provided.
- Length should not exceed 100 characters.
- @NotNull(message = "Address cannot be null")
- @Size(max = 100, message = "Address length cannot exceed 100 characters")

private String address;

- Phone Number:
- Must start with "05"
- Must consists of exactly 10 digits.
- @NotNull(message = "cant be null")
- @Pattern(regexp = "^05\\d{8}\$", message = "Must start with '05' and consists of exactly 10 digits") private String phonenumber;
  - Bank Account Number:
  - must be between 9 and 18 digits
- @Pattern(regexp = "\d{9,18}", message = "Bank account number must be between 9 and 18 digits")

private String bankAccountNumber;

- Credit Card Number:
- Should be valid and unique if provided.

@CreditCardNumber(message = "Invalid credit card number")

private String creditCardNumber;

- AccountBalance:
- Cannot be null.

@NotNull(message = "Account balance cannot be null")

private BigDecimal accountBalance;

- Currency:
- cannot be null.

@NotNull(message = "Currency cannot be null")

private String currency;

- AccounType:
- cannot be null.

@NotNull(message = "Account type cannot be null")

private String accountType;

- CreationDate:
- Cannot be null.
- specify the date format.
- specify the column name in the database if it differs from the property name in the code.

@NotNull(message = "Creation date cannot be null")

@Temporal(TemporalType.DATE)

@Column(name = "creation\_date")

private Date creationDate;