Functional Requirements for "University car park" Website:

**User Registration and Authentication:**

1.1. The website shall allow users to register by providing their full name, email address, university ID number, and password.

1.2. The website shall send a confirmation email to the user's email address upon successful registration.

1.3. The website shall allow registered users to log in using their email address and password.

**Parking Permit Management:**

2.1. The website shall allow users to apply for a parking permit by providing their vehicle registration number, make, model, color, and permit type (e.g., student, faculty, or staff).

2.2. The website shall allow users to view the status of their parking permit application.

2.3. The website shall allow users to renew their parking permit before its expiration date.

2.4. The website shall allow users to update their vehicle and personal information associated with their parking permit.

2.5. The website shall allow users to cancel their parking permit.

**Parking Space Availability:**

3.1. The website shall display real-time information on the number of available parking spaces in each car park on the university campus.

3.2. The website shall provide a color-coded map to visually represent the occupancy status of each car park.

**Parking Space Reservation**

4.1. The website shall allow users to reserve a parking space in a specific car park for a specified time and date.

4.2. The website shall display the reservation details, including car park location, reserved time and date, and a unique reservation code.

4.3. The website shall allow users to modify or cancel their parking space reservation.

**Payment Processing**

5.1. The website shall allow users to securely enter and store their preferred payment method (e.g., credit card, debit card, or university account).

5.2. The website shall process payments for parking permits and reserved parking spaces in a secure and encrypted manner.

5.3. The website shall issue a receipt via email upon successful payment.