# CRC Cards – Website Monitoring System (GRASP-Based)

## Class: User

### Responsibilities:

* - Register for website updates
* - Modify or cancel subscriptions
* - Maintain personal contact data (name, email, mobile)

### Collaborators:

Subscription, NotificationPreference

### GRASP Notes:

Initiates high-level actions (Controller entry point), but does not hold logic.  
Delegates core operations to WebsiteMonitorService.

## Class: Subscription

### Responsibilities:

* - Store website URL and monitoring settings (frequency, channel)
* - Check for updates
* - Notify user when changes occur

### Collaborators:

User, Notification, NotificationPreference, WebsiteMonitorService

### GRASP Notes:

Follows Information Expert: Has data to detect and handle updates.  
May also act as Creator for Notification.

## Class: NotificationPreference

### Responsibilities:

* - Store notification settings (frequency, channel, message template)
* - Provide this information to other components

### Collaborators:

User, Subscription

### GRASP Notes:

Clear Information Expert: owns user preferences and exposes them as needed.

## Class: Notification

### Responsibilities:

* - Contain the message, timestamp, and subscription ID
* - Deliver itself via email or SMS

### Collaborators:

Subscription

### GRASP Notes:

Expert: Handles its own state and delivery.  
Might be split later if delivery logic is moved to a service (-> Pure Fabrication).

## Class: WebsiteMonitorService

### Responsibilities:

* - Periodically check subscribed websites
* - Detect updates
* - Generate and return new notifications

### Collaborators:

Subscription, Notification

### GRASP Notes:

Acts as a Controller: Coordinates update detection and notification creation.  
Keeps high-level system logic out of domain classes.