

The APIs

You may assume that the following APIs are available for use from the Postage Printing Website. This is not necessarily a complete set, but it should cover the functionality in the original Postage Printing Website requirements.

Mock USPS.com API

Assume user account is that of the Postage Printing Website owner, already established with USPS.com

- **Get Postage Label**

input: sender name and address,
recipient name and address,
package type,
mail class,
weight (in total ounces),
Tracking number requested (bool),
Ship date,
user account number and password

output: status: success or failure,
cost of postage,
label (jpg image),
tracking number (if any)

- **Calculate Postage Rate**

input: sender zip code,
recipient zip code,
package type,
mail class,
weight (in total ounces),
Tracking number requested (Y/N)

output: status: success or failure,
cost of postage

- **Refund Request**

Electronic Refunds are available for items where Tracking was used and it is within 10 days of the original printing. If approved, your postage account will be credited the refund amount in about 14 days.

input: tracking number,
user account number and password,

output: acknowledgment of request

- **Status Request (Tracking)**

input: tracking number

output: status information,
including delivery time and date and zip code.

- **Address validation**

input: sender name and address

output: sender name and address (potentially modified)
error code (0 is success, negative numbers are specific errors)

Mock Credit Card Processing API

Assume merchant account # is that of the Postage Printing Website owner, already established with the credit card processor.

- **Process Payment**

input: buyer credit card info:

type of card, name on card, number, exp date, security code

amount to charge

merchant account #

merchant account password

output: Status: approved or declined

Transaction ID

- **Process Refund**

input: Transaction ID

refund amount (less than or equal to original amount)

merchant account #

merchant account password

output: Status: success or failure