

Building a scalable coupon code management system

Author

Avinash Singh

Change history

Version 1.0

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Goal

Creating a coupon code management system where anyone can easily integrate coupons to give discounts in their app, website or any kind of running platform. This platform has two main goals. The first is to remove dependency on payment platforms for coupons and second is to give the vendors(developers) all in one solution where they can manage all their coupon needs.

Background

Coupons are a powerful tool to attract new customers. In a survey by Market track 83% of shoppers have made an unplanned purchase based on a promotion/coupon. And according to a Valassis coupons report In comparison to two years ago, there are significantly more consumers who say they always use coupons, driven by an increase in millennials' frequency of coupon use.

Objective

1. All in one solution for offers, voucher and coupon management.
2. Simple and easy integration on all platforms.
3. Developer friendly Docs website with good UI.
4. Easy ways to create offers, Offer Dashboard, Consumption history, voucher dashboard.
5. Freedom while setting discounts and offers.
6. Remove dependency on payment gateway.

Assumptions

- The users of this platform are someone who has some basic technical knowledge(programming who can copy paste code and modify it according to his need) of technology, developers and companies.
- The target customers can be individual or/and small, medium or large businesses.
- Only pricing strategy is required for the initial draft. The price of the product will be calculated per cost and after considering all variables.
- Only basic structure for features is required for the initial draft. Any additional or unique features can be added after further discussion.
- Any addition or changes in the features, details or types of coupon or discount will be done post further discussion.

Types of coupons

1. Percentage Discount:- In this type the discount will be a percentage of the price of a particular product. Eg: 20% off on purchasing safety shoes.
2. Flat Discount:- These are fixed discounts given on purchase of a particular product. Eg: RS 50 off on purchasing
3. Item Coupon:- Item coupons can only be applied to items, and will not apply to other line items that are not items in the catalogue. Item coupons can be a fixed amount or a percentage.
4. Free Trial Coupon:- Free trial coupons can be used to give new subscriptions different free trial lengths.

Features Overview

1. Single code coupons for mass distribution with the option to limit maximum redemptions and or set a specific redeem by date.
2. Bulk unique codes for individual delivery and tracking.
3. Discounts at the account level or tied to specific subscriptions.
4. Coupons that discount one-time non-subscription charges.
5. Item coupons specific to items from the Item Catalogue.
6. Percentage discounts or fixed amount discounts in multiple currencies for one coupon.
7. Free trial coupons to give new subscriptions special free trial lengths.
8. Offer your discount for one purchase, a limited time, or forever.
9. Set how many times a customer can redeem a specific coupon.
10. Limit customers to one active coupon, or allow multiple coupons on their account and purchases.
11. Ability to edit, expire, and restore coupon campaigns.

How this solution works

This solution works on the final price of the product.

Here are the detailed steps of working:-

- Step 1:- Fetch the final price of the product.
- Step 2:- Apply coupon according to needs.
- Step 3:- Modify the price according to the coupon discount.
- Step 4:- Send a modified amount to payment gateways.
- Step 5:- Now you can proceed to pay.

User persona

User 1:- SAM

Age:-25

Occupation:- Artist

Goal:- Want to attract more customers on his online guitar course through a 7 days free trial.

Pain point:- He has built his website through wordpress. He is searching for a free trial coupon plugin.

User 2:- Mohan

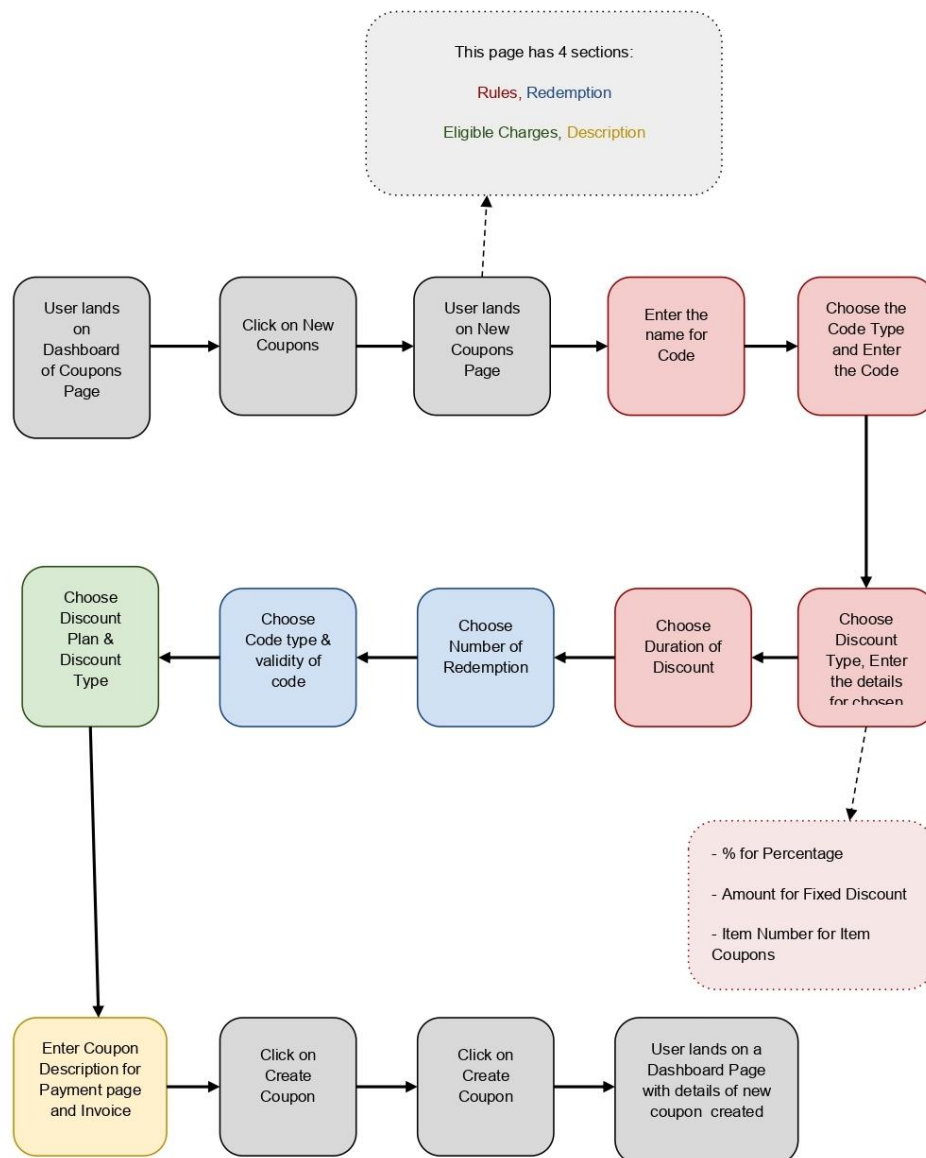
Age:- 40

Occupation:- Sr Manager at an ecommerce startup.

Goals:- Trying to offer discounts on all the platforms like mobile app, desktop website.

Pain point:- Frustrated with limited options available. He needed to prebuild platform for all types of coupon code but couldn't find it at one place.

Rough user flow How the user create coupon




The Product User Flow

In order to create a coupon, these will be the sample flow structure.

Coupon code creation dashboard

[Home](#) [Categories](#) User Name • Log Out

 New coupon Settings Help

Active Coupons

Name	Code #	Discount	Duration	Redeemed By	Total Redeemed

Expired Coupons

Name	Code #	Discount	Duration	Redeemed By	Total Redeemed

*This is the dashboard page with details of all the current and previous coupons created.
To create a new coupon click on “New coupon Button”*

New Coupon - Rules Section - Part I

[Home](#) [Categories](#) [New Coupon](#) User Name • Log Out

New Coupons

Help

Rules

Create an internal name for your Coupon

Internal Name

Pick something that you and your team can recognise later

What code your customers enter to redeem the coupons?

Code Type

☐ Singe Code

☒ Bulk Unique Code

Code

The code will be used to redeem the coupon on an account

This page is divided into four sections: Rules, Redemption, Eligible Charges and Description.

New Coupon - Rules Section - Part II

[Home](#) [Categories](#) [New Coupon](#) User Name • Log Out

New Coupons Help

What type of discount would you like to create?

Discount Type

☐ Percentage Discount

☐ Fixed Amount Discount

☒ **Item Coupons**

☐ Free Trail Coupons

Item Number

Enter Here

The item number is unique identification given to each item.

Once redeemed on customer Account, what is the duration of the discount?

Duration

☐ Forever

☐ Limited Time

☒ **Single Use**

This is the period of time in which the eligible charges will be discounted by the coupon redemption

The Rules section covers 4 details : Name of coupon, Type of Coupon, Type of Discount and Duration of Coupon.

New Coupon - Redemption Section

Home	Categories	New Coupon	User Name • Log Out
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New Coupons

[Help](#)

Redemption

What is the minimum Number of times that the coupon can be redeemed across all customers?

Number of Redemption

☐ Unlimited

☒ Specific Number

Minimum Number of Redemption

When can a customer redeem this code on an accoiunt?

Code Type

☐ Anytime

☒ Before a specific Date

Redeem By Date

Redemption section covers 2 details: Number of times Coupon can be used and expiry date of the coupon once redeemed.

New Coupon - Eligible Charge Section

[Home](#) [Categories](#) [New Coupon](#) User Name • Log Out

New Coupons

[Help](#)

Eligible Charges

Which Plans are eligible for discounts?

Duration

☐ Specific Plans

☒ All Plans

What type of discount would you like to create?

Discount Type

☐ Subscription
This will create a coupon that will only discount the specific subscription on the account. If your customer has more than one subscription this will allow you to control which subscription are discounted.

☒ Account
This will create a coupon that will discount all eligible subscription on an account.

Description

Add a description of the coupon for your customer.

This section covers two details:-

Types of plan

Types of discount

New Coupon - Description Section

Home Categories New Coupon User Name • Log Out

New Coupons

Help

Description

Add a description of the coupon for your customer.

Payment Page Description

Enter Here

Invoice Description

Enter Here

Create Coupon Cancel

Here users have to write a description which you want to show to the customer when he used/redeemed the coupon.


Once all the details are entered, click on the 'create coupon button'.

The details will be saved and a coupon will be created as per those details.

Once the coupon is created the details of the active coupons are updated on the Dashboard.

Coupon Dashboard

[Home](#) [Categories](#) User Name • Log Out

 New coupon Settings Help

Active Coupons

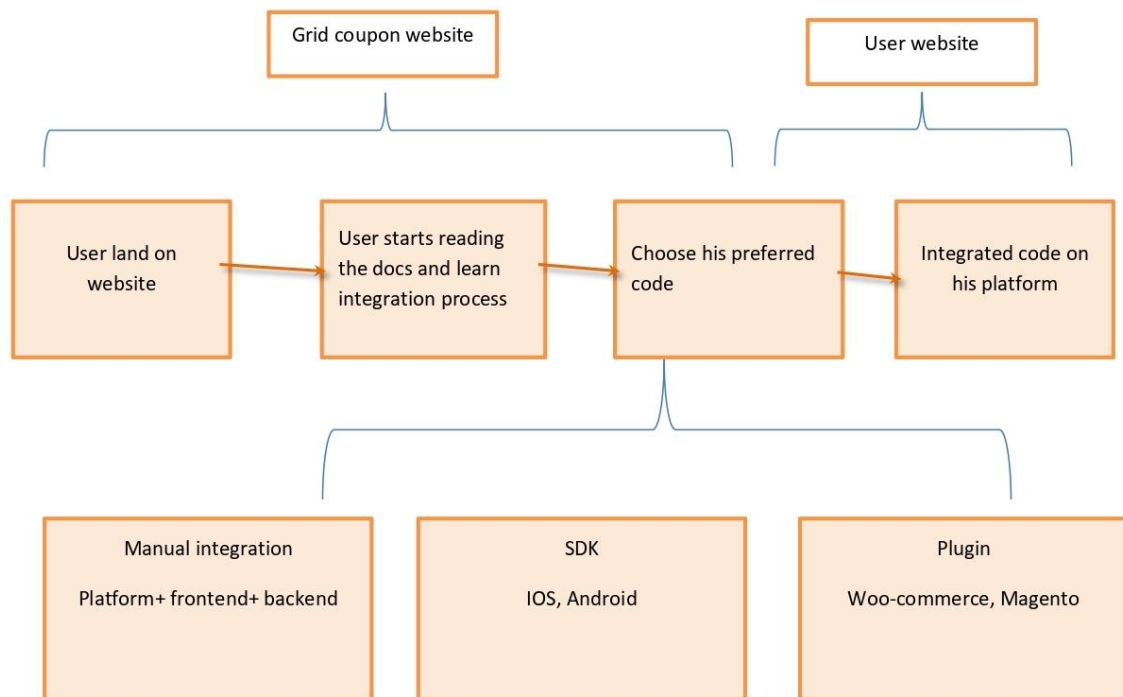
Name	Code #	Discount	Duration	Redeemed By	Total Redeemed
xyz	#xyz	xyz	xyz	xyz	0/100

Expired Coupons

Name	Code #	Discount	Duration	Redeemed By	Total Redeemed
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After successfully creating a new coupon, the user will be back on the Dashboard Page where the details of the new coupon created will be displayed along with other records.

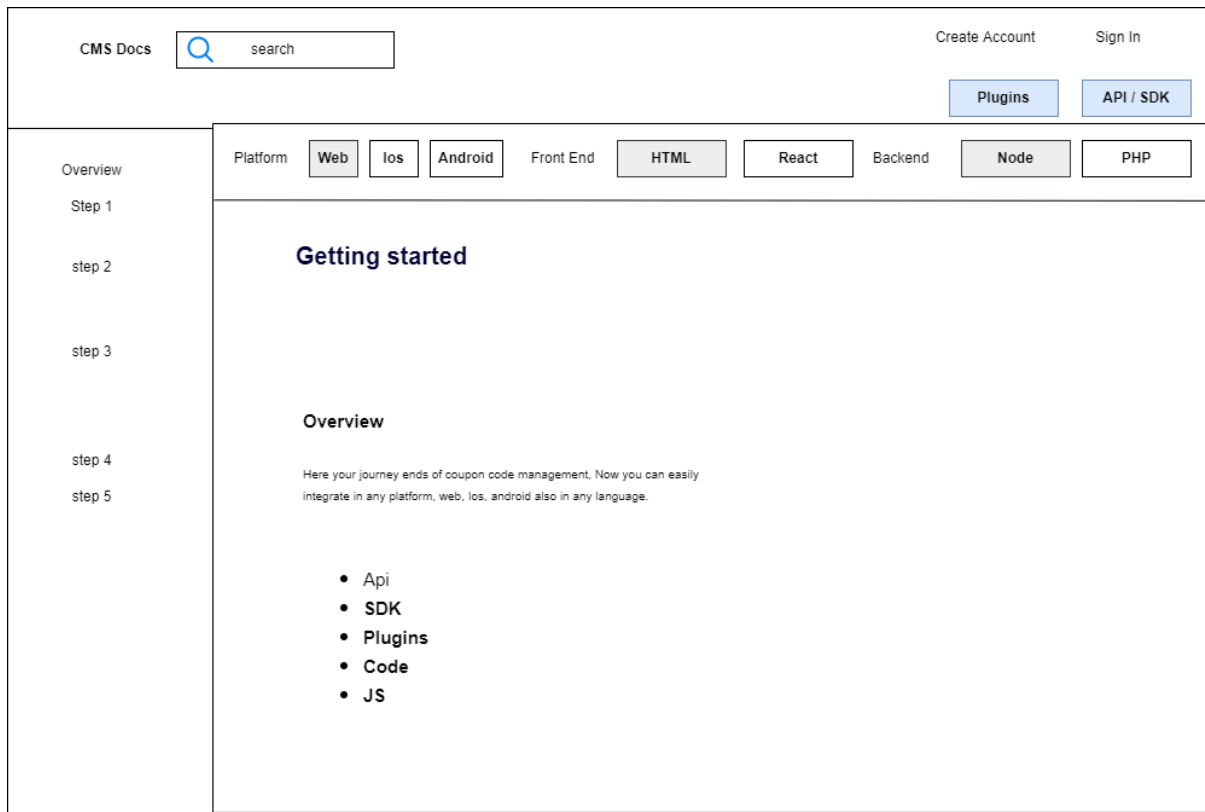
Rough user flow How the user Integrate coupon in his platform



In order to integrate the Grid coupon system, these will be the sample flow structure.

The documentation page helps users to understand the Grid coupon system. It contains clean, easy and well-structured UI/UX. It has a step by step process well documented in it to help fast and better integration.

Here is the getting started page where users can see various features/options offered.



The getting started page is the first page which is well documented and has all the details about the Grid Coupon System platform and their integration process. On the left hand side there is a sub navigation menu for fast navigation.

Quick start Page

Quick start page has a language specific guide where the user can choose his preferred language.

Entire screen is filled with language options. First, the developer has to choose the platform, then front end, then back end.

CMS Docs

[Create Account](#)
[Sign In](#)

[Plugins](#)
[API / SDK](#)

Overview

Step 1

step 2

step 3

step 4

step 5

Platform

Web

ios

Android

Front End

HTML

React

Backend

Node

PHP

Quick start

Explore a full, working code sample of an integration with Grid CMS.

Download full App

Download full code and modify it according to your need.

```

const app = express();
// This is a public sample test API key.
// Don't submit any personally identifiable
information in requests made with this key.
// Sign in to see your own test API key
embedded in code samples.
const grid = require("grid")
('sk_test_tR3PYbcVNZZ796H48S4VQ2u');

app.use(express.static("public"));
app.use(express.json());

const calculateOrderAmount = (items) => {
  // Replace this constant with a calculation
of the order's amount
  // Calculate the order total on the server
to prevent
  // people from directly manipulating the
amount on the client
  return 1400;
};

```

Developers have the option to download whole sample code. With sample code he can easily modify the Grid coupon sample app according to his needs. They can also download SDK and API.

After selecting the preferred language there is step by step documentation where the developer can easily understand the code or he can copy-paste sample code.

Pricing

The pricing is categorised into two types: Yearly subscription and Customised Pricing. The subscription is yearly because it is perceived that the monthly subscription won't be able to cover the cost even if it did the price will be high. Also there are chances that there might be huge gaps between the monthly subscription which might lead to an increase in the churn rate of the company.

Customised Subscription is basically for large firms who might need the platform with extra features or customised features for their businesses.

Yearly Subscription will have three categories:

Individual with access to 1 user login(Eg:- someone who sells courses online)

Small Business with access to 3 - 5 user login (number can be specified per cost)

Medium/Large Business with access to 7 - 10 user login (number can be specified per cost)

For every additional user a certain sum can be charged separately per cost.

Customized Pricing will have fixed pricing per the cost incurred during customisation, and for every additional update a particular sum can be charged. This will allow us to cover the cost incurred during every update.

For better understanding below is the Pricing strategy in point:

1. Yearly Subscription

- Individual - 1 User
- Small Business - 3 - 5 user
- Medium/Large Business - 7- 10 Users

Note: Xyz amount for every additional user.

2. Customized

- Fixed price after considering all variables
- For every Bug fixing/update a nominal amount is charged

Metrics

Feature	Goals	Metrics
Activation	User signing up Integration with platform	Number of user paying on platform Minutes of time consumed to integrate this platform
Retention	User using this platform for long time	Number of user using platform every month
Referral	User being satisfied with this platform and referring it	Number of users sharing the links to people
Revenue	Target revenue/ Number of users purchased the product.	Customer Lifetime value (CLTV)

Open Issues

NA

Q&A

NA