

NEWS PORTAL APPLICATION TECHNICAL SPECIFICATIONS

Technologies used

MVC	CodeIgniter 3
CSS Library	Bootstrap 3 (CDN) FontAwesome 4 (CDN) Google Fonts (CDN)
JS Library	JQuery 1.11.3 (CDN)
Email Library	PHPMailer 5.2.10
PDF Library	TCPDF 6.2.11
User Profile Picture	Gravatar

Workflow of the portal

Visitors on the portal are restricted from viewing more than 10 news items. They can browse through the latest 10 news, subscribe to RSS feed or export PDF of allowed news. To access advanced options like filter by category or tags, search etc. they need to sign up.

Only signed up users are allowed to post news items.

There is no admin area at this point. Further improvement is possible to add an admin area where users, categories and posts can be managed.

Following chart shows the workflow for visitors:

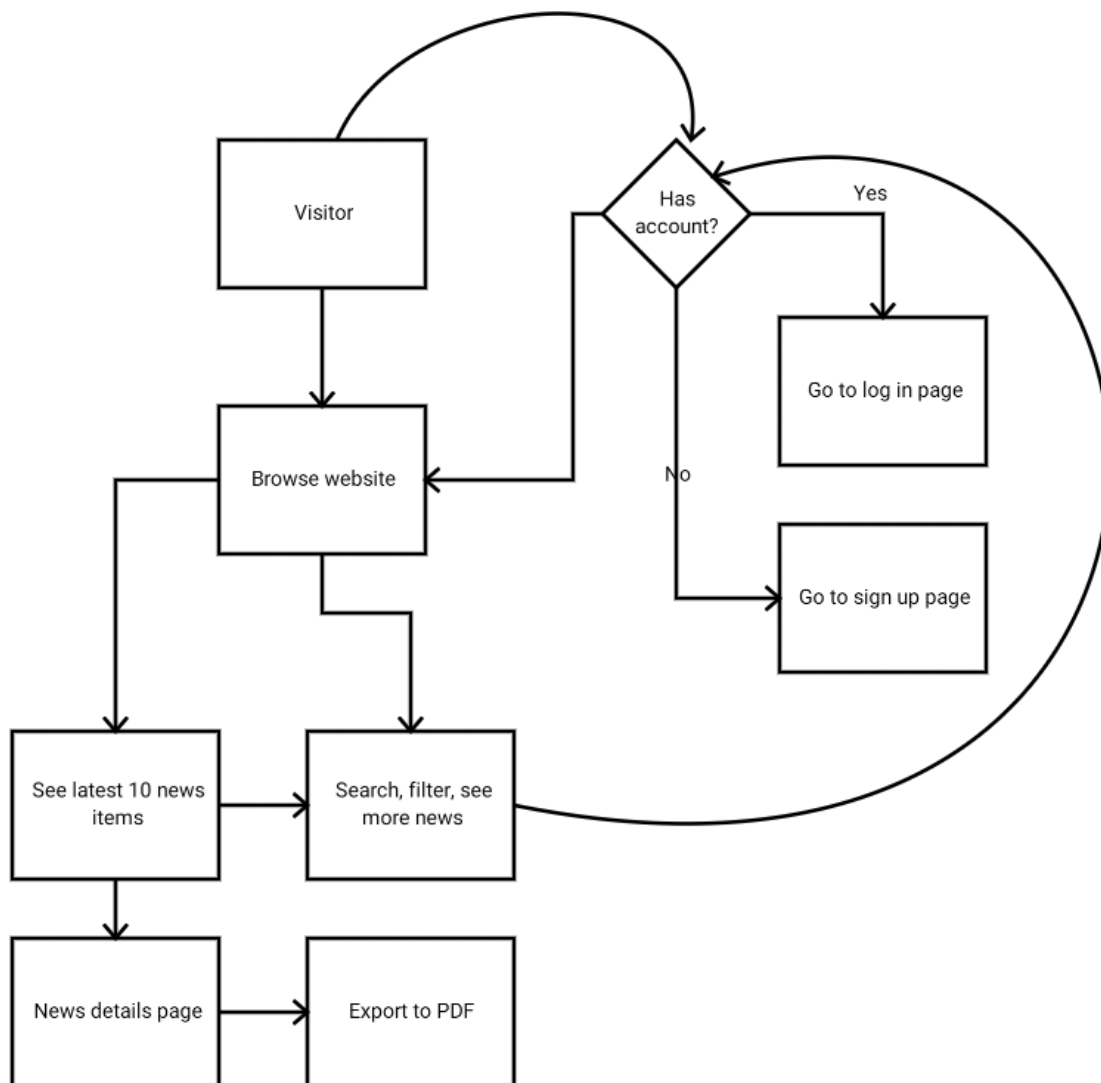


Figure: Workflow for visitors

This flow chart explains the steps in sign up process:

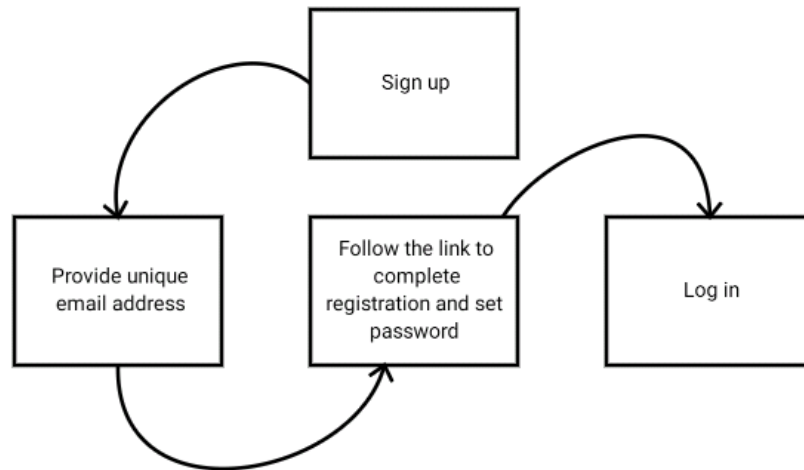


Figure: Sign up process

Log in process and available features can be understood from the following flow chart:

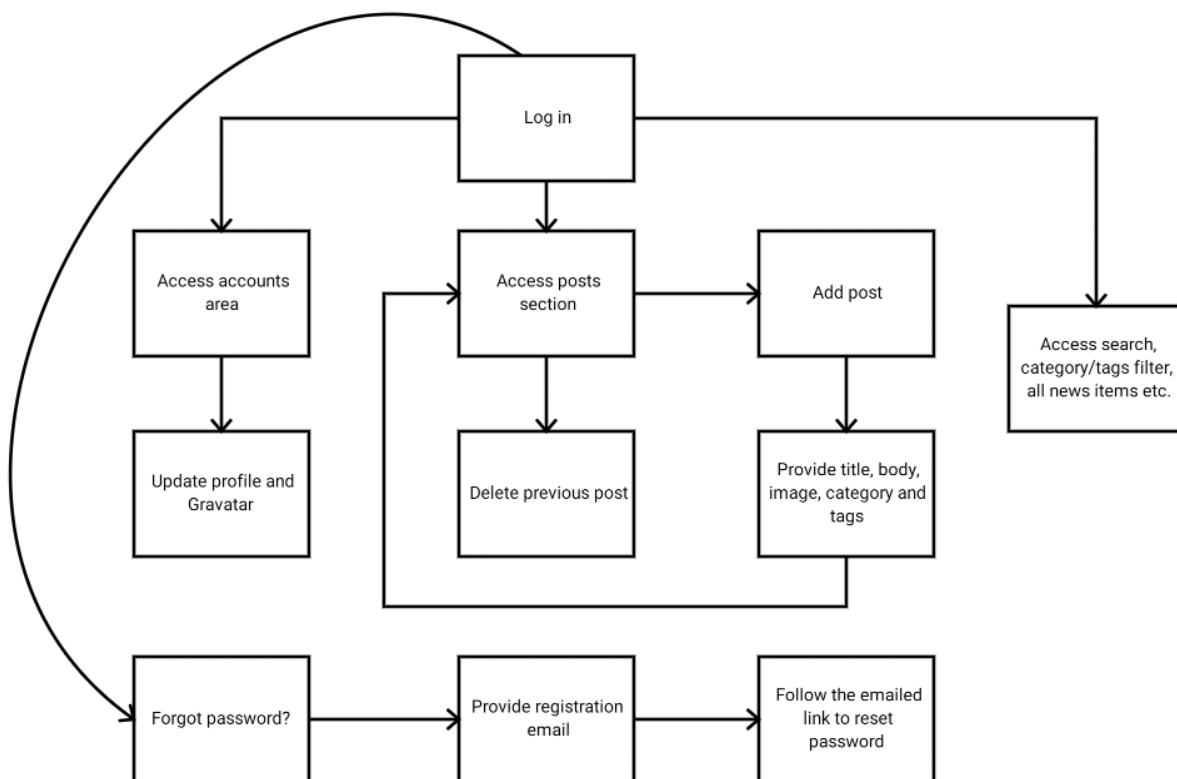


Figure: Log in process and features

Component integrations

The web application relies on several third party libraries to function properly. PHP Mailer, TCPDF etc. are required to send email and create PDF respectively. Also the application downloads CSS and JS resources from cloud for the front-end. Here is a chart to explain the integration flow.

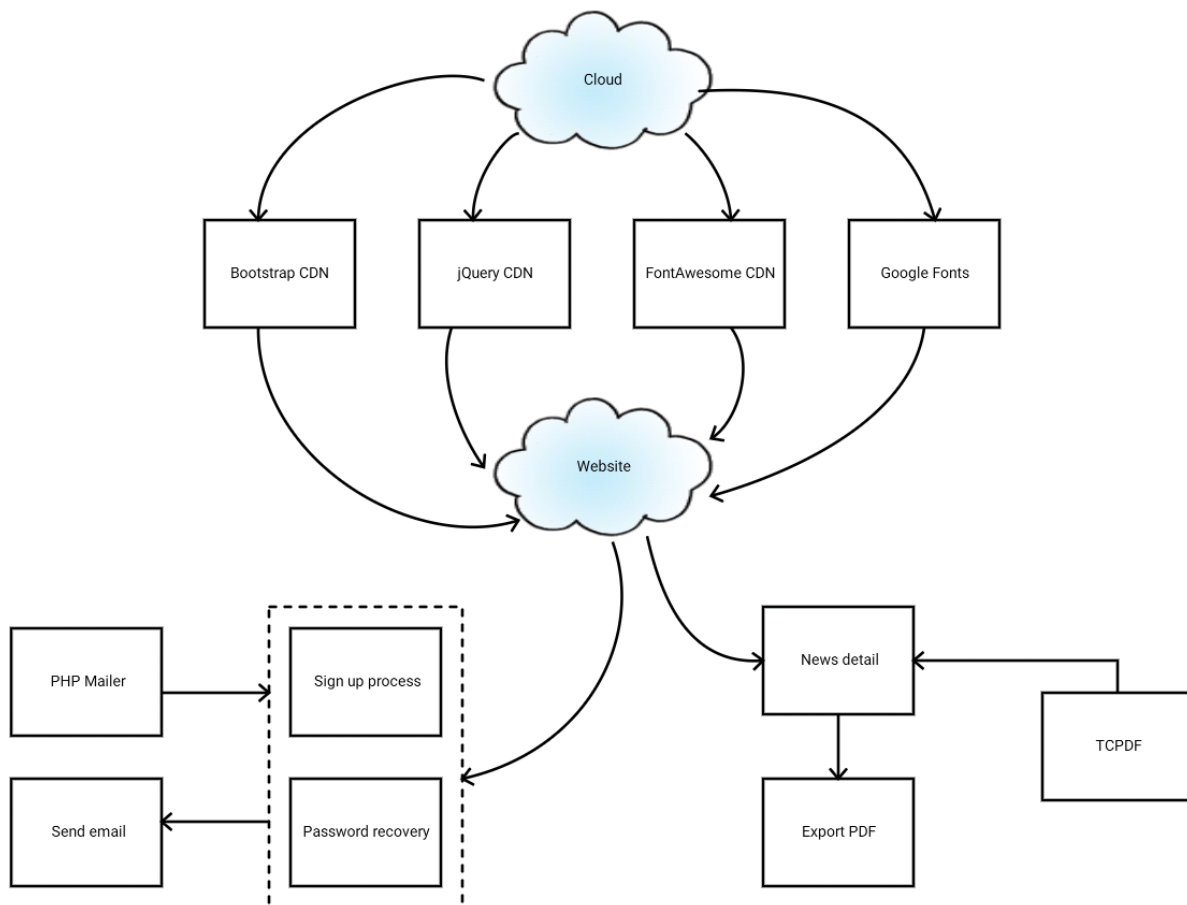


Figure: Third party component integration

Database Structure

Database for the application consists of seven tables which are related using foreign keys. Users, posts and their related data are stored using these tables. Following image shows the relation between the tables.

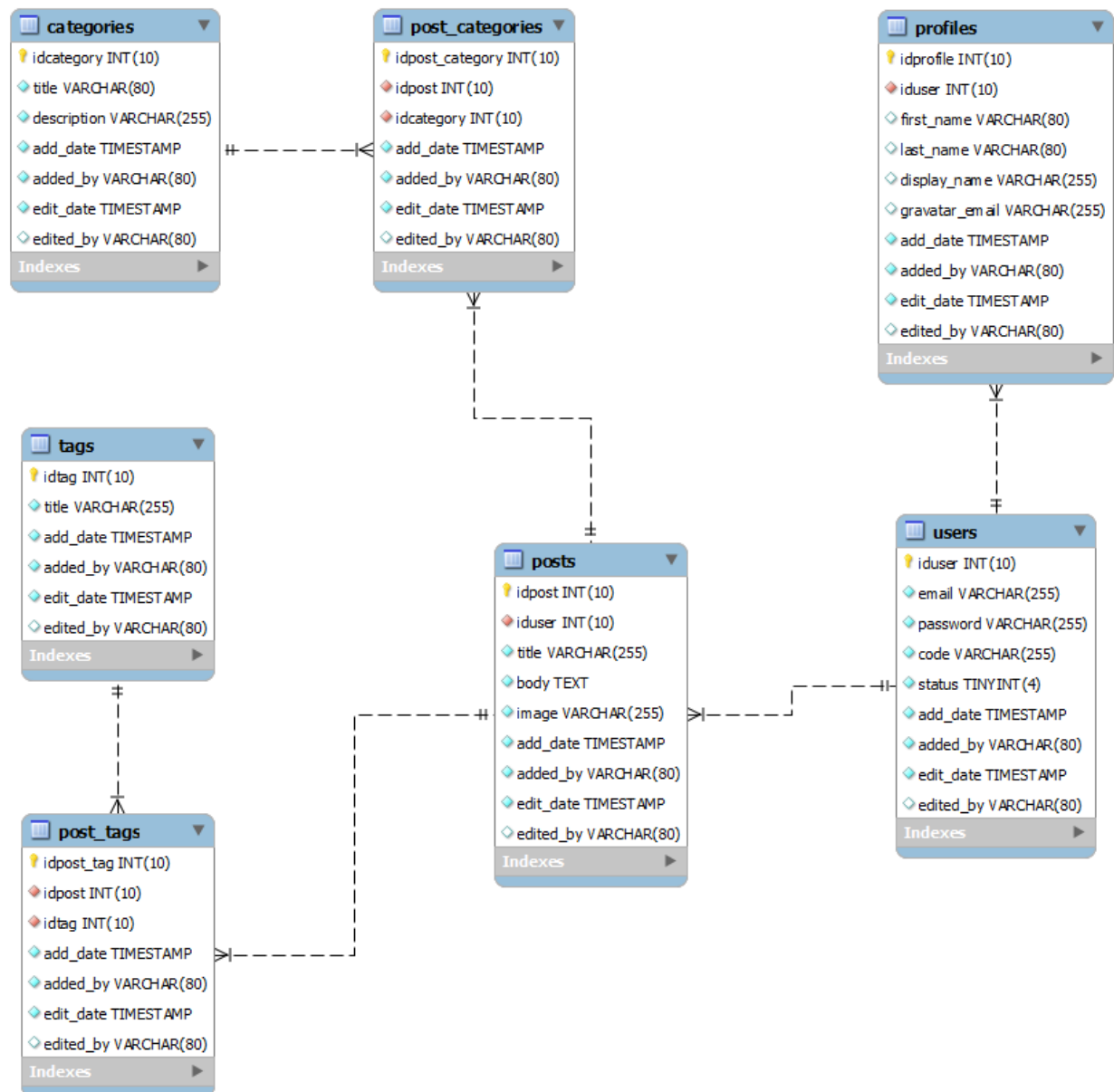


Figure: Database structure