FINFO Functional Specification

1- Server requirement

a. Apache
b. PHP >= 5.4
c. Mcrypt PHP Extension
d. OpenSSL PHP Extension
e. Mbstring PHP Extension
f. Tokenizer PHP Extension
g. MySQL >= 5.5

2- Browser Compatibilities (as of the development date)

a. Desktops
    i. Firefox - The latest two versions
    ii. Chrome - The latest two versions
    iii. Internet Explorer - The latest two versions
    iv. Safari - The latest two versions
    v. Opera - The latest two versions
    vi. Microsoft Edge
b. Tablets and Mobiles (iOS & Android)
    i. Firefox - The latest two versions
    ii. Chrome - The latest two versions (based on OS)
    iii. Safari - The latest two versions (based on OS)
    iv. Opera - The latest two versions of app

3- Framework and Library

a. Laravel 5.1
b. Bootstrap 3.3 (responsive)
c. jQuery 1.11.3

4- Modules Deliverables

(All password format will be highly secure)

a. Front End – FINFO Public Website
    i. Home page, about us, contact us and so on (Dynamic pages)
    ii. Registration
    iii. Package selection / Multiple currencies
    iv. Checkout and Payment gateway
    v. Login page for FINFO admin or editor (With known url only, this will not show a link to public)

b. Front End – Client Public Website
    i. Home page and other dynamic pages
    ii. Login page
    iii. Forgot password
c. Back End – FINFO
    i. Dashboard
    ii. User Management

iii. Dynamic page and subpage
    1. Page or subpage will tie with a selected menu. This mean that when we create page we can choose which menu to display that page
    2. Ability to change the order of the page within each section
iv. Client list and detail
v. Billing - To view invoices Paid, Unpaid, Overdue and Cancelled
vi. Automated invoice generation - (This will be a backend process which will generate the invoice in a format provided by WW and save as pdf file or word file) Invoice will be automatically generated 1 week before expiry date of package subscription. (This should be a backend process which generate invoice and automatically send to client within our defined period). A cronjob will be setup and run everyday to check for any upcoming invoice
vii. Revenue/Profit

d. Back End - Client
i. Dashboard
ii. Website update (CMS)
    1. Page or subpage will tie with a selected menu. This means that when we create a page, we can choose which menu to display that page
    2. Ability to change the order of the page within each section
iii. Dynamic page and subpage
iv. User profile/ account information
v. Setting
vi. User Manager
vii. List of Modules subscribed to/ history
viii. My Invoices
ix. Payment Gateway option
x. Ability to upgrade package
xi. Ability to unsubscribe to package

e. Package features
i. Latest Financial Highlight
ii. Real time stock pricing and charts
iii. Financial annual report
iv. Press Release
v. Financial Results
vi. Webcast
vii. Presentations
viii. Announcements
ix. Investor Relations Calendar
x. Newsletter & Broadcast
xi. Email Alerts
xii. Media Access

5- Functional specifications for each module

a. Front End – FINFO Public Website

i. Home page, about us, contact us and so on (Dynamic pages)

Footnote	Item Name	Notes
1	Layout Template	Will be responsive through phone and tablet.
2	Menu	There will be main menu and submenu
3	Content	Will be dynamic according to database

ii. Package selection / Multiple currencies

Footnote	Item Name	Notes
1	Package selection	There will be 3 packages for user to choose. (Bronze, Silver, Gold)
2	Package detail	Package detail will be generated from DB or config file.
3	Package click	When clicked, user will be routed to registration page with selected package.
4	Currency Display	There will be a dropdown for currency selection if there are more than one currency
5	Currency Configuration	We will use a config file for add or remove currency. Format will be provided later

iii. Registration

Footnote	Item Name	Notes
1	Package selection	This show display the package selected by user.
2	Account name	This will be an unique subdomain automatically creation (eg. account-name.finfo.com).
3	Fields	Check table below
4	After completed	User will be routed to checkout and payment page after register completed.

→ Field of Register

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	account_ name	text	Yes	6	20	check if account user does not exist/required. Validation should include subdomain format. Eg. cannot have space, all lowercase, no special character.
2	package_name	radio	Yes	1	1	check at least one package selected/required
4	first_name	text	Yes	5	50	required
5	last_name	text	Yes	5	50	required
6	email_address	email	Yes	5	50	required/valid email/unique. uniqueness here will check against account name and email address. so one email address should belong to one account name only
7	password	password	Yes	6	15	check if password meet the min
8	confirm_password	password	Yes	6	15	check if password meet the min and match the password field
9	term and condition	checkbox	Yes	1	1	check if user has checked the term and condition

iv. Checkout and Payment gateway

Footnote	Item Name	Notes
1	Check out page	Field: check table below
2	Payment gateway	Third party or APIs will be provided by WW later
3	After completion	User will be routed to thanks you page and message to check email for account verification
4	Account email verification	Will be sent after user completes the registration with a link to verify their email address.
5	After account verified	User will be routed to login page on user subdomain.
6	Invoice email notification	Will be sent to user with invoice in pdf file and user subscription detail.

→ **Field of Payment (data will be stored on third party service)**

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	payment_method	radio	Yes	1	1	required/at least one payment selected
2	creditcard_type	radio	Yes	1	1	required
3	creditcard_number	number	Yes	16	16	required / check if cc number format is valid
4	security_code	number	Yes	3	3	required
5	expiry_month	dropdown	Yes	1	1	required
6	expiry_year	dropdown	Yes	1	1	required
7	zip_code	text	Yes	1	10	required
8	country	dropdown	Yes	1	1	required

This will be the form field user needs to input, no payment details will be stored in our db. This will be used by third party service.

Ability to add a reserved subdomains list into the application. When a user is trying to register, you will need to check against this reserved subdomains list (eg. www, admin) and the existing account names (eg. company1, company2). This list can be added in a config or database table.

Registration process:

1. Fill up registration form (with 2 textfields to enter the account name of their choice. Preferred Account Name 1, Preferred Account Name 2). Upon entering the account name, system to do an AJAX verification on its availability. We would like to give client the 2 options for account name. Administrator will then approve 1 of them or neither or enter another account name
2. Once payment is being made, email verification will be sent to the email address under the Field of Register. At this point, site is not setup
3. Once email has been verified, FINFO will be notified of this new registration, prompting to do a manual approval so the account can approved and site can be setup. Another email will be sent out to client informing them their account is now under review for approval. At this point, site is not setup
4. Account name approval. FINFO will choose the preferred choice.
    a. If FINFO approves the account name, site will be setup. Email will be sent to client that account has been approved, setup and the login details

b. If FINFO rejects the account name, FINFO will get in touch with client offline to get a new account name. FINFO able to edit the account name and approves it (See 4a)

v. Login page for FINFO admin or editor

Footnote	Item Name	Notes
1	Layout Template	Will be responsive through phone and tablet.
2	Display	This page will display a login form for FINFO user only
3	Forgot password link	This link will route user to forgot password page.

→ Field of Login

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	email_address	text	Yes	5	50	required/valid email address/user existing in our app/ check user type again FINFO user only.
2	password	password	Yes	6	15	required

vi. Forgot password

Footnote	Item Name	Notes
1	Layout Page	Will be responsive through phone and tablet.
2	Reset button	This will allow only FINFO admin or editor to login. Validation will check against user type.
3	Process	This will check if email exists in our DB then create a email with link to reset password page and send to user. For security reason, the reset link will change and expire in 24 hours.
4	Fields	Account, Email
5	Link to forgot password	After clicked, user will be routed to forgot password page

→ Field of Forgot password

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	email_address	text	Yes	5	50	required/valid email address/user existing in our app/check user type again FINFO user only.

b. Front End – Client Public Website

Display a customize 404 page for each client. Using their website's color, font, template, logo, favicon, etc. Client is not able to change this page/content.

i. Home page and other dynamic pages

Footnote	Item Name	Notes
1	Layout Template	This will be a pre defined template from FINFO backend. layout will be responsive through phone and tablet.
2	Menu	There will be main menu and submenu
3	Content	Will be dynamic according to database

ii. Login page For eg. if the login page is http://abc.finfo.com/login, then the login page should show the following:
Account Name: abc (label)
Email Address: <text field>
Password: <password>

Footnote	Item Name	Notes
1	Layout Page	Will be responsive through phone and tablet.
2	Sign in button	This will allow only Client admin or editor to login. validation will check against user type.
3	Fields	Account, Email, Password
4	Link to forgot password	after clicked, user will be routed to forgot password page

→ **Field of Login**

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	account_name	text(read only)	Yes	5	50	required/valid account existing in our app
2	email_address	text	Yes	5	50	required/ valid email
3	password	password	Yes	6	15	required

iii. Forgot password

Footnote	Item Name	Notes
1	Layout Page	Will be responsive through phone and tablet.
2	Reset button	This will allow only FINFO admin or editor to login. validation will check against user type.
3	Process	This will check if email is existed in our DB then create a email with link to reset password page and send to user. For security reason, the reset link will change and expire in 24 hours.

4	Fields	Account, Email
5	Link to forgot password	After clicked, user will be routed to forgot password page

→ Field of Forgot password

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	email_address	text	Yes	5	50	required/valid email address/user existing in our app

c. Back End – FINFO

i. Dashboard

Footnote	Item Name	Notes
1	Chart	This will display for each module we create for dashboard
2	Upcoming invoice	This will show a list of upcoming invoice for clients
3	New client register	This will generate chart for register today, this week and total
4	Other	Recent Client Activity

ii. User Management

For eg. John Doe is in charge of Company A & B. Company A is the parent company of B. They have to purchase 2 separate packages under FINFO, cos it's 2 different companies. When Company A creates a user (johndoe@companya.com), Company B can also create a user with the same email (johndoe@companya.com). The email address is unique to the account name. System will check against account name and email

Footnote	Item Name	Notes
1	User list	List all internal users for FINFO (only admin user can view users). This will also include pagination, search user, sort user.
2	User type	There will 2 types of user. 1 is FINFO admin (full control including manage user), 2 is FINFO editor (full control but cannot access to user module)
3	Create user, Edit user	Check table below for fields
4	Email notification	New user will receive an email with user information and credential.
5	Delete User	This will be a soft delete, flag will set on that user for soft delete
6	Publish and Unpublish user	This is be a feature to enable or disable user
7	User created by / at	This will display who create new user / datetime
8	User edited by / at	This will display who edited users / datetime
9	Last Logged on	This is display when this user last logged on (datetime)

→ **Field of User create/edit**

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	first_name	text	Yes	2	50	required
2	last_name	text	Yes	2	50	required
3	email_address	text	Yes	5	50	required/ check if email is valid/ unique
4	password	password	Yes	6	15	required
5	confirm_password	password	Yes	6	15	required/ check if match with password
6	user_type	dropdown	Yes	1	1	required/ value will be admin or editor

iii. FINFO internal user change password page

Footnote	Item Name	Notes
1	layout	will be responsive
2	fields	please check below for fields
3	process	user will be required to input current password, new password and confirm new password. system will validate current password if it is valid.

→ **Field of Change password**

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	current_password	password	Yes	6	15	required/valid
2	new_password	password	Yes	6	15	require/ check if format is valid
3	confirm_password	password	Yes	6	15	require / check if match with new_password

iv. Website Update (CMS)

Footnote	Item Name	Notes
1	Menu and Submenu	FINFO will be able to create page menu and submenu
2	SEO	FINFO will be able to input meta keyword, meta description and title for SEO standard requirement
3	Page content	Content creator will be used a simple text editor which also including upload image, file. we will use WYSIWYG as our text editor (this will include upload functionality)
4	Create / Edit	please check the table below for fields.

5	Menu ordering	FINFO will be able to order menu up or down for display in public site
6	Publish / Unpublish	This is be a feature to enable or disable page manually
7	Page created by / at	This will display who create new page / datetime
8	Page edited by / at	This will display who edited page / datetime

→ Field of content editor

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	title	text	Yes	5	50	required
2	slug	text	Yes	5	50	required/ this will be converted from title into slug user can edit but need to be unique in the same url level
3	content	text editor	Yes			required / text editor will also contain the feature to upload image and files
4	status	dropdown	Yes			required / value will be publish or unpublish
6	meta_title	text	No	0	70	
7	meta_desc	text	No	0	170	
8	meta_keyword	text	No	0	170	

v. List of clients & company information

Footnote	Item Name	Notes
1	Layout page	Will be responsive through phone and tablet.
2	Search and filter	FINFO will be able to search or filter clients in different criteria - client name - email address - status - company name - address - phone - date between
3	View list of clients	FINFO will be able to see list of clients order by subscription date. FINFO should be able to view a list of clients and edit each company's details
4	Clients and company	This will display all client information with company detail
8	Subscription	Display all subscription that belongs to client

→ Field of Company information

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	company_name	text	Yes	2	100	required/ check minimum and maximum character
2	finfo_account_name	text	Yes	2	15	required/ unique
3	phone	number	Yes	9	10	required/ check minimum and maximum character
4	address	text	Yes	10	50	required
5	email_address	text	Yes	5	50	required/ check if email is valid

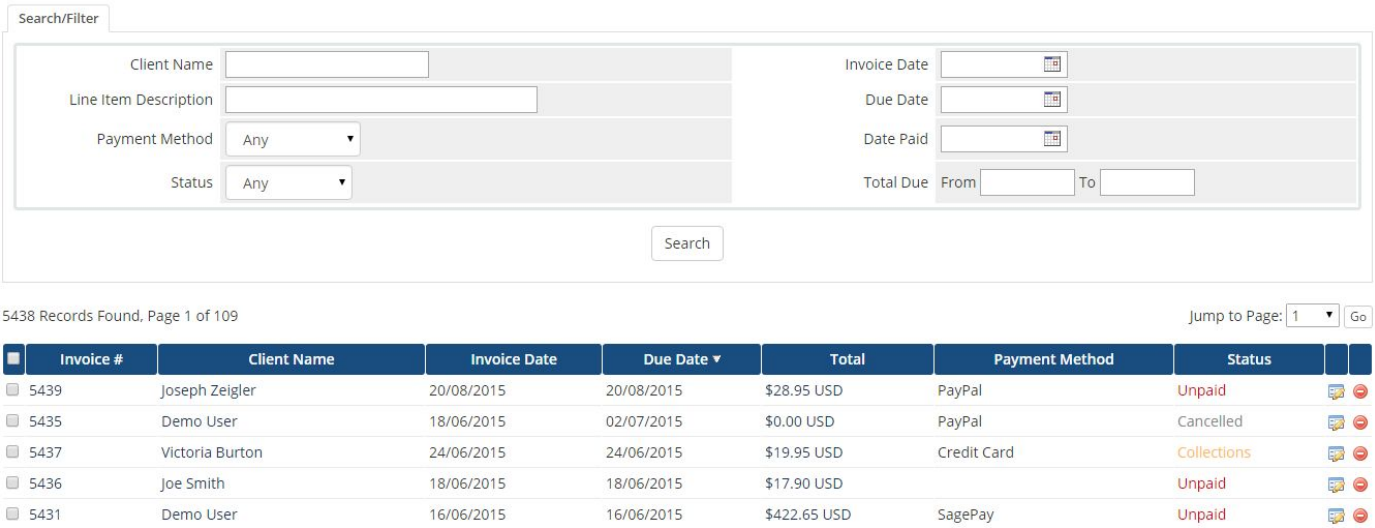
6	website	text	No	5	50	
7	established	datepicker	No	5	5	
8	number_of_employee	number	No	1	4	
9	common_stock	number	No			this field will be present for total amount of company stock
10	main_business_activities	text	No			
11	company logo	file	Yes			(jpg, png)
12	favicon	file	No			If no favicon, use the company's logo and resize

→ Field of Client Information

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	first_name	text	Yes	2	100	check minimum and maximum character
2	last_name	text	Yes	2	3	check minimum and maximum character
3	phone	number	Yes	9	10	require
4	email_address	text	Yes	5	50	check minimum and maximum character

v. Billing

Footnote	Item Name	Notes
1	Layout page	Will be responsive through phone and tablet.
2	List of Orders	FINFO will be able to manage all orders (Pending, Active, Cancelled). FINFO will be able to search and filter with different criteria. - order ID - order number - date between - amount - client - payment status
3	Order detail	FINFO will be able to see order detail, accept the order, cancel order, delete order
5	Invoice list	FINFO will be able to see invoice list previous invoices and future invoices. FINFO will be able to search and filter with different criteria.
6	Add / Edit / Delete Invoice	FINFO will be able to create invoice / edit or delete invoice.
7	Mark invoice	FINFO will be able to mark invoice as paid or unpaid, history will be stored in db for every transaction.
10	Email Notification	FINFO will be able to send email to client for upcoming invoice notification.



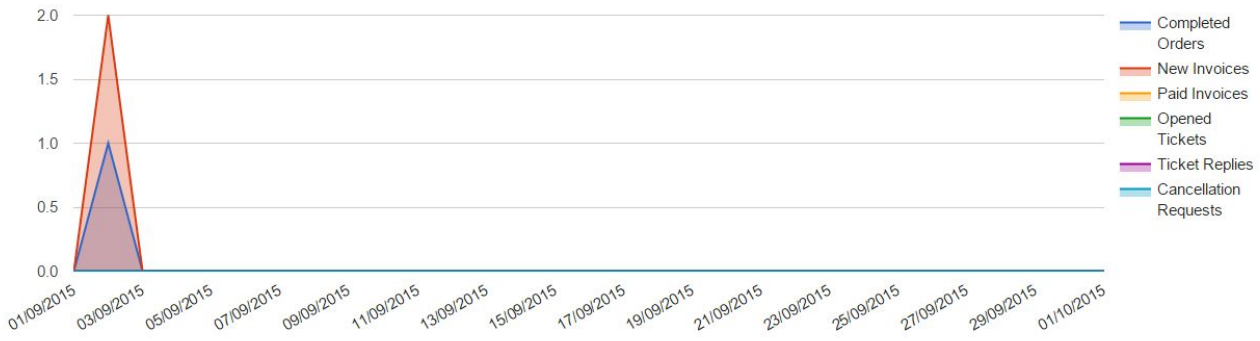
- Payment are made prior to approval, hence they are not orders as client has already made payment
- FINFO can just proceed to view invoices
- Under invoices, FINFO can view invoices via paid, unpaid, overdue, cancelled
- If client doesn't pay for their renewal in time, see below:
  - Client can still login to the backend and continue to do updates (so they can still proceed to make payment after the due date)
  - Site is not accessible and instead a message will be displayed
- Auto-renewal by default
- Payment is done monthly, default monthly payments are deducted unless the user goes to their profile and either unsubscribes or upgrades
- For auto renew, notification email will still be sent 1 week in advance to inform that $<amount> will be deducted from their account on <date>
- If auto renew is not selected, an email with invoice will be sent 1 week in advance and an email notification reminder 3 days prior to due date, if no payment is made yet
- When payment is made, a receipt will be generated and email to client
- Invoice number format: YYYY-MM-X (X=sequential number). Example: 2015-09-1

→ **Field of Invoices**

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	invoice_number	number	Yes	11	11	
2	client_name	text	Yes			
3	due_date	date	Yes			
4	amount	text	Yes			
5	payment_method	text	Yes			
6	payment_status	enum	Yes			
7	order_date	datetime	Yes			

vi. Revenue/Profit (Monthly/Yearly)

Footnote	Item Name	Notes
1	Revenue list	Display all sale earning a period of time
2	Filter revenue	Fields will be month, and year
3	Export to excel	FINFO will be able export report as excel file



Date	Completed Orders	New Invoices	Paid Invoices	Opened Tickets	Ticket Replies	Cancellation Requests
Tuesday 01/09/2015	0	0	0	0	0	0
Wednesday 02/09/2015	1	2	0	0	0	0
Thursday 03/09/2015	0	0	0	0	0	0
Friday 04/09/2015	0	0	0	0	0	0

→ Field of Revenue/Profit

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	date	date	Yes			
2	completed_order	label	Yes			total completed order in a period of time
3	new_invoices	label	Yes			total of new upcoming invoices and active invoices
4	paid_invoices	label	Yes			total of paid invoices in a period of time

d. Back End – Client

I. Dashboard

Footnote	Item Name	Notes
1	Layout page	Will be responsive through phone and tablet.
2	Upcoming invoice	Client will be able to see their upcoming invoice.
3	Broadcast schedule	Client will be able to see the next broadcast newsletter
4	Visitor counter	Client will be able to see visitor traffic (this should be implement with Google analytic)

5	Stock chart	Client will be able to see current stock value

II. User Profile / Account Information

Footnote	Item Name	Notes
1	Layout page	Will be responsive through phone and tablet.
2	Edit User Information	Check table below for fields. He/she can not change his account name but other field can.
3	Change password	Check table below for fields

→ Field of Company information

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	company_name	text (readonly)	Yes	2	100	required/ check minimum and maximum character
2	finfo_account_name	text(readonly)	Yes	2	15	required/ unique
3	phone	number	Yes	9	10	required/ check minimum and maximum character
4	address	text	Yes	10	50	required
5	email_address	text	Yes	5	50	required/ check if email is valid
6	website	text	No	5	50	
7	established	datepicker	No	5	5	
8	number_of_employee	number	No	1	4	
9	common_stock	number	No			this field will be present for total amount of company stock
10	main_business_activities	text	No			
11	company logo	file	Yes			(jpg, png)
12	favicon	file	No			If no favicon, use the company's logo and resize

→ Field of Client Information

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	first_name	text	Yes	2	100	check minimum and maximum character
2	last_name	text	Yes	2	3	check minimum and maximum character
3	phone	number	Yes	9	10	require
4	email_address	text	Yes	7	9	check minimum and maximum character
5	current_password	password	No	6	15	check if current password is valid
6	new_password	password	No	6	15	
7	confirm_new_password	password	No	6	15	check if match with new password

III. Settings

Footnote	Item Name	Notes
1	Layout page	Will be responsive through phone and tablet.
2	Template customization	Client will be able to change template main color, font style, font color
3	Google Analytics	Client will be able to insert google analytics for tracking performance on their

		website

- Field to add Google Analytics code
- Provide step by step instructions (via FAQ, example: https://docs.shopify.com/manual/settings/general/google-analytics)

→ Field of setting

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	color	color picker	No			
2	logo	file	No			dimension will provide on the form once the mockup is provided
3	font_size	dropdown	No			
4	font_style	dropdown	No			
5	font_color	color picker	No			
6	google_analytics	text	No			

IV. Client's User Manager

Footnote	Item Name	Notes
1	Layout page	Will be responsive through phone and tablet.
2	Client's users list	Client (admin type) will be able to see all users. Search and filter will be available in different criteria. - search by full name, email address - filter by user type
3	Client user create/edit/delete	Client (admin type) will be able to create new user (both admin and editor type) There must be at least 1 active administrator
4	Client user type and permission	There will be 2 types of client user - admin will be able to manage everything - editor will be able to manage everything except user module

→ Field of Client user create/edit

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	first_name	text	Yes	2	50	required
2	last_name	text	Yes	2	50	required
3	email_address	text	Yes	5	50	required/ check if email is valid/ unique
4	password	password	Yes	6	15	required
5	confirm_password	password	Yes	6	15	required/ check if match with password
6	user_type	dropdown	Yes	1	1	required/ value will be admin or editor

V. List of Modules subscribed to/ Package information

Footnote	Item Name	Notes
1	Layout page	Will be responsive through phone and tablet.

2	Show current subscription plan	Display all module/package that client have been subscribed
3	Show available upgrade package	Client will be able to choose new package to upgrade
4	Checkout and payment module	Upgrade package will be route client to checkout page.
5	Subscription history	Client will be able to view all subscriptions they have subscribed before.
6	Unsubscribed	Client will be able to unsubscribe their account. There will be no refund for unsubscribe. Send email to FINFO informing them of company A has unsubscribed from which package. Send email to client to acknowledge of them unsubscribing from which package.(we will flag a status delete for this account. front end will display page not found). A page "Your account has been deactivated or deleted, please contact administrator" will be displayed

→ Field of unsubscribed package

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	option_to_comeback	radio	Yes	5	50	required. There will be 2 options, 1 is remove account permanently and 2 is will come back later. so if use choose 2 we will just deactivated their account then later on if they want to come back we will resume all their data.
2	reason_to_unsubscribe	text	No	5	200	

VI. My Invoices

Footnote	Item Name	Notes
1	Layout page	Will be responsive through phone and tablet.
2	List past invoices	Display all invoice that already claim.
3	List upcoming invoice	Display all invoice that will claim.
4	Search and filter	Client will be able to search and filter in different criteria
5	Paid invoice	Client will be able to pay for unpaid invoice. Client will be route to payment page with specific invoice.

→ Field of my invoices

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	invoice_number	number	Yes			
2	invoice_date	date	Yes			
3	due_date	date	Yes			
4	total	number	Yes			
5	status	enum	Yes			(unpaid, paid)

VII. Payment Gateway option

Footnote	Item Name	Notes
1	Payment transaction	Allow user to select with payment he/she want to process with invoice
2	Payment option (optional)	Implement payment function to apply to user register

e. Package features

i. Latest Financial Highlights

1. Back End

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	Create/ Edit / Delete	Check below for fields
3	Features	Initial setup of financial year is required If this is the initial setup, allow user to enter the previous quarter's financial results and its labels (eg. 3Q13). Optional If this is the subsequent quarter, allow user to enter the quarter's financial results 1st to 3rd quarter financial result will use the predefined rows and labels set up in the initial setup. 4th quarter financial result may have a different setup
4	Select quarter	There will be 4 quarter and full year option to choose
5	Select year	Year range will be provided by WW
6	Insert title and value	This will be dynamic field created by add new field button
7	Process	When new quarter inserted the old quarter will move to Archive table
8	Listing/ search/ filter	Client will be able to see latest financial list. Client also can search and filter with different criteria - filter by year and quarter - search by title and value

→ Field of Latest Financial Highlights

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	select_quarter	dropdown	Yes	1	1	required
2	select_year	dropdown	Yes	1	1	required
3	title	text	Yes	5	50	required
4	value	number	Yes			required
5	publish					option to publish and datetime

Note: title and value will be dynamically add or remove for multiple title and value.

2. Front End

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	There will be a link on client front	Data will display in table format with title, value from current quarter and last

	end to view latest financial highlights	quarter and Growth in percentage. Formulas will be provided by WW.

ii. Real-time stock pricing and charts

1. Back End

Process/flow:

1. Are you subscribed to ASX? (First-Time)
    a. If Yes, proceed to enter the info with regards to the API
    b. If No, display the list of resellers and ask client to choose and make payment to subscribe to ASX

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	ASX APIs	ASX will provide APIs for FINFO to connect and get stock data
3	Create/Edit	The fields are dependent on the ASX API and the chart that you will be using

4	Feature	- Task scheduler/Batch process to retrieve the stock price
		- Allow client to change settings, subject to ASX's guidelines. See below for settings:
		  - Lag time (5 mins / 1 hour)
		  - Graph settings (axes)
		  - Chart colour (red, blue, green, yellow)
		  - Graph colour (red, blue, green, yellow)
		  - Price Index colour (red, blue, green, yellow)

→ Field of Stock Chart

The fields are dependent on the ASX API and the chart that you will be using

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	account_id	number	Yes			required
2	account_name	text	Yes	5	50	required
3	api_url	text	Yes	5		required / check if url is valid
4	price	number	No			
5	volume	number	No			
6	change	number	No			
7	button_color	color picker	Yes	1	1	required
8	text_color	color picker	Yes	1	1	required
9	hightlight_color	color picker	Yes	1	1	required
10	background_color	color picker	Yes	1	1	required
11	border_thickness	dropdown	Yes	1	1	required
12	view_option	dropdown	Yes	1	1	required (weekly, monthly, yearly)
13	refresh_frequency	dropdown	Yes	1	1	required
14	front_page_refresh_frequency	dropdown	Yes	1	1	30 sec, 1 min, 2 min, 5 min, 10 min
15	chart_template	radio	Yes	1	1	required (will be provided 3 different options)

2. Front End

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	Stock widget box for home page	This widget will display stock price, changes, volume, date time in a box. The data will update in sequence of time defined by backend.
3	Click on stock widget	Will route user to stock chart page
4	Stock chart page	- This page will display a chart graph with periods filter (1 day, 1 month, 3 months, 6 months, 1 year, 3 years, 5 years). - Graph will automatically updated in a period of time which define by backend.

iii. Financial Annual Reports

1. Back End

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	Create/ Edit/ Delete	Client will be able to upload cover image, pdf file, and financial year. (pdf is limited to 3MB large and only 1 file allow to upload in a record). Client will be able to delete any specific record (This is also delete pdf file from system)
3	List/ search/ filter	Client will be able to see a record listing, client will also be able to search and filter record base on different criteria
4	Email alert	after new record saved, email notification will be generated and send to all subscribers. Email content will contain a link to download financial pdf.

→ Field of Financial Annual Reports

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	title	text	Yes	5	50	required
2	file_upload	file	Yes			required/ check file size maximum 3MB. Only pdf file allow to upload
3	description	text	Yes	5	50	required
4	financial_year	drop-down	Yes			required
5	cover_image	file	No			file type (jpg, png) cover dimension will be defined after layout provided. default cover will use if no cover image has been uploaded.
6	publish					option to publish and datetime

2. Front End

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.

2	Annual reports listing page	This page will display a list of annual reports with cover image order the by years descending
3	Click on each report	When click on each report, pdf file will be downloaded.

iv. Press Release

1. Back End

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	Create/Edit/Delete	Client will be able to upload a press release document with title, date of release. client will also be able to enable filter function in Month/year in front end.
3	List/ search/ filter	Client will be able to see a record listing, client will also be able to search and filter record base on different criteria. - filter by year, month - search by title/ date

→ Field of Press Release

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	title	text	Yes	5	50	required
2	date	datepicker	Yes	1	1	required / check if date is valid
3	upload	file	Yes	1	1	required / check if file size is smaller than 3MB (pdf, ppt, pptx, doc, docx)
4	enable_filter	checkbox	No			(this field will enable a filter function for front end user to be able to filter the press release). ref from RFQ v9 press release section.
5	publish					option to publish and datetime

2. Front End

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	Press releases list	This page will display a list of press releases uploaded by client order by date descending with pagination. User will be able to filter by month & year
3	Click on each press release	When click on each release, document file will be downloaded.

v. Financial Results (Archived)

1. Back End

Footnote	Item Name	Notes
1	Process	after new quarter of financial has input, the old financial will move to archived table.

2. Front End

Footnote	Item Name	Notes
1	Display	this will be display in financial highlight. This will display the archived financial highlights

vi. Webcast

1. Back End

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	Create/Edit/Delete	Client will be able to select a quarter and year, webcast url and captions.
3	List/ search/ filter	Client will be able to see a record listing, client will also be able to search and filter record base on different criteria - filter by quarter/ year - search by caption, url

→ Field of Webcast

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	quarter	dropdown	Yes	1	1	required
2	year	dropdown	Yes	1	1	required
3	url	text	Yes	5	250	required / check if url format is valid.
4	caption	text	Yes	5	100	required
5	publish					option to publish and datetime

2. Front End

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	Display	This will tie to a financial result of a particular quarter and year.

vii. Presentations

1. Back End

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	Create/Edit/Delete	Client will be able to select a quarter and year, upload presentation in pdf format (Max 3MB)
3	List/ search/ filter	Client will be able to see a record listing, client will also be able to search and filter record base on different criteria

→ Field of Presentations

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	quarter	dropdown	Yes	1	1	required
2	year	dropdown	Yes	1	1	required
3	upload	file	Yes	1	1	required / check if file has been selected and file size is below 3MB (pdf, ppt, pptx)
4	publish					option to publish and datetime

2. Front End

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	Display	This will tie to a financial result of a particular quarter and year.

viii. Announcements

1. Back End

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	Create/Edit/Delete	Client will be able to select a quarter and year, announcement date, title and upload announcement document in pdf format (Max 3MB)
3	List/ search/ filter	Client will be able to see a record listing, client will also be able to search and filter record base on different criteria - filter by year, quarter - search by title, date

→ **Field of Announcements**

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	quarter	dropdown	Yes	1	1	required
2	year	dropdown	Yes	1	1	required
3	title	text	Yes	5	50	required
4	date	datepicker	Yes	1	1	required / check if date is valid
5	upload	file	Yes	1	1	required / check if file has been selected and file size is below 3MB (only pdf)
6	publish					option to publish and datetime

2. Front End

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	Display	This will tie to a financial result of a particular quarter and year.
3	Search/ Filter	User will be able to search and filter in different year - filter by year, quarter - search by title, date

4	Click on announcement	Document will be downloaded when user click on link

ix. Investor Relations Calendar

1. Back End

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	Create/Edit/Delete	Client will be able to input Event title and select event date (past and future)
3	List/ search/ filter	Client will be able to see a record listing, client will also be able to search event by date or title

→ Field of Investor Relations Calendar

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	event_title	text	Yes	5	50	required
2	event_datetime	datetimepicker	Yes	1	1	required/ check if date is valid
3	publish					option to publish and datetime

2. Front End

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	Display	This will display a list of event order by date descending

x. Newsletter & Broadcast

1. Back End

There will be a cap on the number of broadcasts sent yearly (per client/account) and the number of recipients per each broadcast. (Eg. 12 broadcasts/year & 2500 recipients/broadcast). Per year is referring to the duration of the subscription. Create a setting on the FINFO backend to be able to change these values. Eg. <textfield> broadcasts/year, <textfield> recipients/broadcast

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	Create/Edit/Delete	Client will be able to: - Choose between predefined template or upload pdf - Set schedule for broadcast in advance
3	List/ search/ filter	Client will be able to see a record listing, client will also be able to search newsletter by date or title
4	Email Seed list	Client will be able to add or remove email from testing list.
5	Send test	Client will be able to send out a test broadcast to the seed list to preview. Use the

		SMTP when sending the seed list (do not use the email service provider). Prefix "<PREVIEW> " in the email subject. Eg. Subject: September Newsletter,when sending out the test email, subject should be showing "<PREVIEW> September Newsletter"
6	Process	After newsletter created and schedule to send out set, there will be a background process running and check if the schedule meet the current time. This newsletter will send out to all users who have subscribed to newsletter.
7	Report	This will implement with Email service provider to get number of read, unread, bounce.

→ Field of Newsletter create/edit page

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	newsletter_type	radio	Yes	1	1	required - type1: pdf file - type2: a predefined template where client can fill the information into the template
2	predefined_template	template	Yes	1	1	check if fields in predefined template are valid (predefined template is a template we create as simple and leave some textbox or image for user to input)
3	upload	file	Yes	1	1	require if newsletter type is pdf file ,size (less than 3MB)
4	subject	text	Yes	5	50	require/ this will send to user email
5	email group list	checkbox	Yes	1	all	require at least 1 selected
6	sender_email	text	Yes	5	50	require/ check if valid email
7	reply_to_name	text	Yes	2	20	require
8	reply_to_email	text	Yes	5	50	require / check if valid email
9	schedule_it	checkbox	No			this is an optional feature which client can set a schedule to send out the newsletter. check this field will display broadcast form.
10	publish					option to publish and datetime

→ Field of Broadcast Settings

Display the remaining number of broadcasts for the rest of the year. If the number of broadcasts has reached the limit, display a message and disable them from creating new broadcasts

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	status	dropdown	Yes	1	1	required (draft, live)
2	broadcast_date	datepicker	Yes	1	1	required/ check if date is valid
3	broadcast_time	timepicker	Yes	1	1	required/ check if time is valid

2. Front End

Footnote	Item Name	Notes
1	Email layout	This will be a email layout from a predefined template or a link to a pdf file.
2	Unsubscribe	User will be able to unsubscribe newsletter from their received email.

xi. Email Alerts (Subscription tool)

1. Back End

Option to import existing list and which categories they belong to into the system CSV file format will provide for sample.

A scheduler/cron job will run on a daily basis (once a day). Eg. scheduler runs at 12:01am on 17-Sep-2015, it will retrieve all the new data (excluding Newsletter) created and published from 16-Sep-2015 12:00am to before 17-Sep-2015 12:00am.

Subscribers will only receive 1 email containing all the links to the various content.

See below for example:

Subscriber A is subscribed to Annual Report and Press Release.

Subscriber B is subscribed to Press Release, Announcements and Investor Relations Calendar.

Subscriber C is subscribed to Announcements.

When scheduler runs at 12:01am on 17-Sep-2015, and there's new data for Annual Report, Press Releases and Investor Relations Calendar. These data are created and published from 16-Sep-2015 12:00am to before 17-Sep-2015 12:00am.

In the above example:

Subscriber A will receive email alerts containing Annual Report and Press Release links.

Subscriber B will receive email alerts containing Press Release and Investor Relations links.

Subscriber C will not receive any email.

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	Manage (Create, Edit, Delete)	Client will be able to manage the list of subscribers.
3	List/ search/ filter	Client will be able to see a record listing, client will also be able to search event by date or title - filter by category - search by name / email address
4	Export	Client will be able to export the list of subscribers into excel format (CSV)

→ Field of Email back end

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	name	text	Yes	5	50	required
2	email_address	text	Yes	5	50	required/ check if it is a valid email
3	categories	checkbox	Yes	1	all	check if category at least checked one

2. Front End

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	Subscription page	This page will display a form with name, email and a list of categories in checkbox format
3	Captcha	User will be required to enter a correct captcha value before process a subscription
4	Process	- check if email already exist in subscription table - if exist update new subscription category - if not exist create new subscription record with selected category
5	Unsubscription	User will be route to unsubscribe page. Email field will be required.

		(unsubscribe form will require user to input email address and we will list all their selected categories, they can uncheck all for unsubscribe all or check what they want to unsubscribe). their subscription will be updated according to their selection.

→ **Field of Email front page**

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	name	text	Yes	5	50	required
2	email_address	text	Yes	5	50	required/ check if it is a valid email
3	categories	checkbox	Yes	1	all	check if category at least checked one. **Categories will be provided by WW**
4	captcha	text	Yes	1	5	check if the input captcha is match with captcha image

xii. Media Access

1. Back End

We will be setting a limit of 500MB for each client. Set this limit in a config on GUI where FINFO can change. Total filesize of media access per client should not exceed that. There should be a check, if reach limit, disallow to upload more files, unless some housekeeping is done. Display a warning message if limit has reached and if there's <= 10% of space left.

After client register with us, we will create a subfolder in media access folder with client account name. so every media files associate with client will go in this folder.

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	Media users listing	- Client will be able to see all media user registered - Client can approve or reject media user registration
3	Media categories listing	Client will be able to see a list of media categories and number of total files in each category
4	Media category create/edit/delete	Client will be able to create new category, edit, and delete category. - any file belong to category deleted will be deleted also
5	Media files listing	- Client will be able to see all media files created - Client will be able to search or filter files in different criteria - search by uploaded date/ filename - filter by media user/ filesize - Client will be able to see files assign to individual user
6	Media file create / edit /delete	Client will be able to create new media file by upload and insert file title, date and description. File size will depend to each file type, Ex: for pdf what is the max size? JPEG, PNG (high res) what is the max size for this?
7	Media access expiration time	- If no expiration was set then the default expiration will be use. The expiry date is tied to the login. If the login has expired, the files under that login are no longer accessible. There is no expiry date on each of the file or media category
8	Media access request	Client will be able to set permission on categories or a list of files for media company to access in different criteria. Client will be able to set permission on categories or a list of files for each of the media request to access
9	Media request approve	Client will be able to approve or reject media access request from any media

		company. An email will be sent to registered media company email with media access link, email, password and media expiry date.
10	Media access report	- Client can view which media was downloaded by a media company - Client can view when the media was downloaded by a media company - Client can view how many times the media was downloaded by a media company - Consolidated report by media. Filter by date range. - Client can export the reports in excel format
11	Media access setting	- Client can enable auto-approve media access requests. If this is enabled, this media user can access all the files in all the categories. The expiry date is based on the default expiry access set in the settings - Client can set the default expiry access (Duration of the media access). For eg. 5 days

→ Field of Media category create/edit page

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	category_name	text	Yes	5	50	required

→ Field of Media file create/edit page

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	category	dropdown	Yes	1	1	required. This is will generated from the media category module
2	file_name	text	Yes	5	50	required
3	file_upload	file	yes	1	1	require
4	date	datetimepicker	No			
5	description	text	No			
6	expiry_date	number	No			number of expiration from the created date.

→ Field of Media set access permission page

This page will appear when client clicks on Approve. Client has to select the category and/or files in the category. There will be an option for client to allow access to the entire library. Once this has been set, an email will be sent out to media user about the newly created account and their credentials

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	company	dropdown	Yes	1	1	required (data will be generated from media user company table)
2	media_categories	checkbox	Yes	1	all	check if category at least one selected
3	media_files	checkbox	Yes	1	all	check if files at least one selected

→ Field of Media setting page

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	auto_approve	radio	Yes	1	1	required
2	default_expiry_date	number	Yes	1	3	check if category at least one selected
3	media_request_recipient_email	text	No			All media request registrations notifications will go to this email address. If no email is set here, send to client's administrator account

2. Front End

Footnote	Item Name	Notes
1	Layout	will be responsive in phone and tablet.
2	Media user registration page	This page will be display a form for media user to register their account for access media file
3	Process	after media user registered, user will be routed to thank you page. A notification email will be sent to client for new registration. Application will be pending for client to review and approve or reject. An email will be sent to media user for review notification.
4	Forgot password page	Media user will be able to reset password, a reset password will be sent to user with a link to reset password page.
5	Media user login page	This page will be used by media user to login and access media list. Only active accounts (non-expired) can login
6	Media list page	This page will be unique to each media user with a list of files provided by client. User can download files in high res provided by client. Expiry dates are not set to each of the file. It is set to the login. Once the media access login expires, all files under that login will no longer be accessible

→ Field of Media user registration page (password will generate from system and send email)

No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
1	company_name	text	Yes	5	50	required
2	email_address	text	Yes	5	50	required/ check if it is a valid email
5	mobile or phone	text	Yes	5	50	required
6	full_name	text	Yes	5	50	required

→ Field of Media user forgot password page

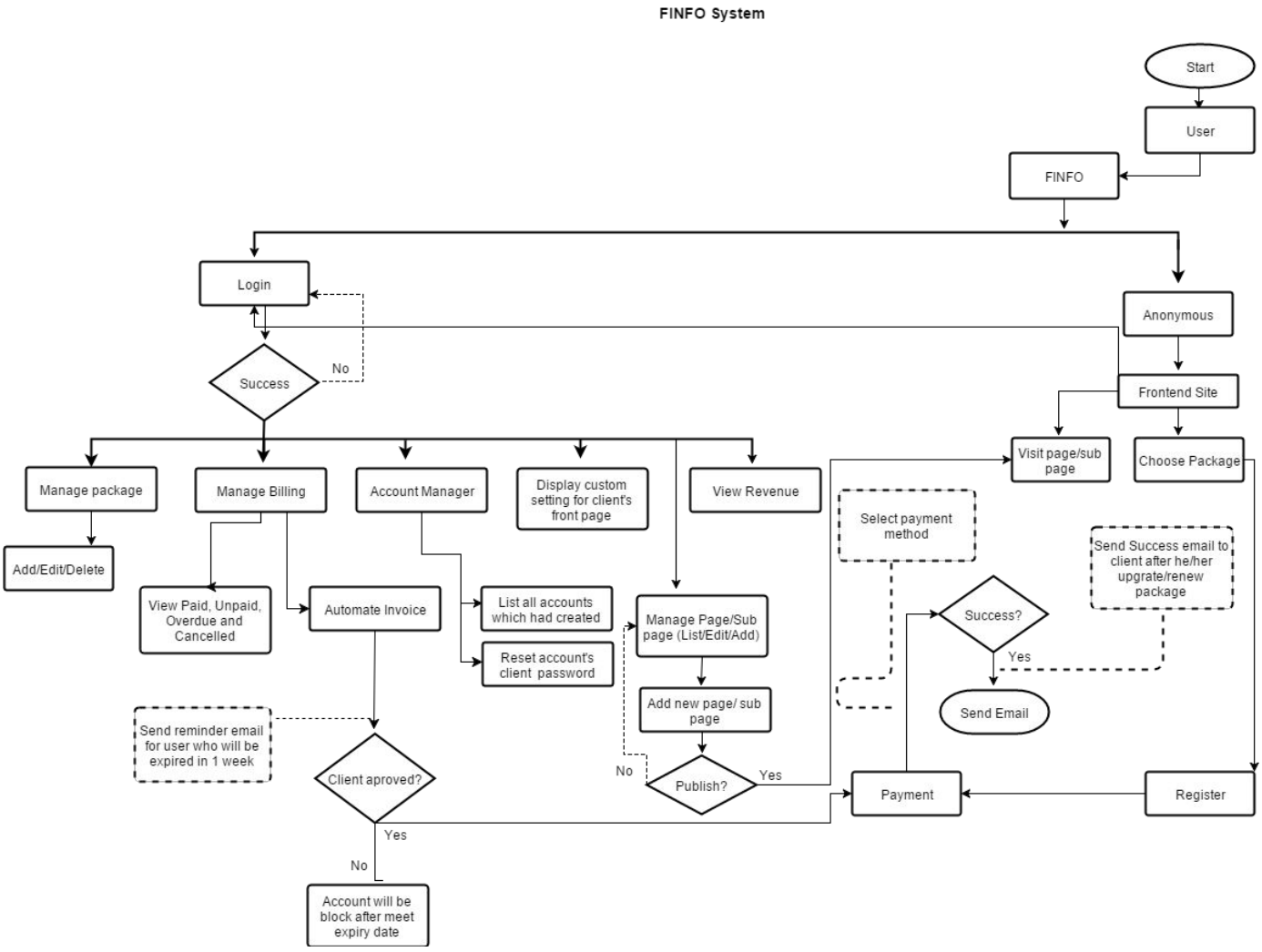
No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
2	email_address	text	Yes	5	50	required/ check if it is a valid email

→ Field of Media user login page

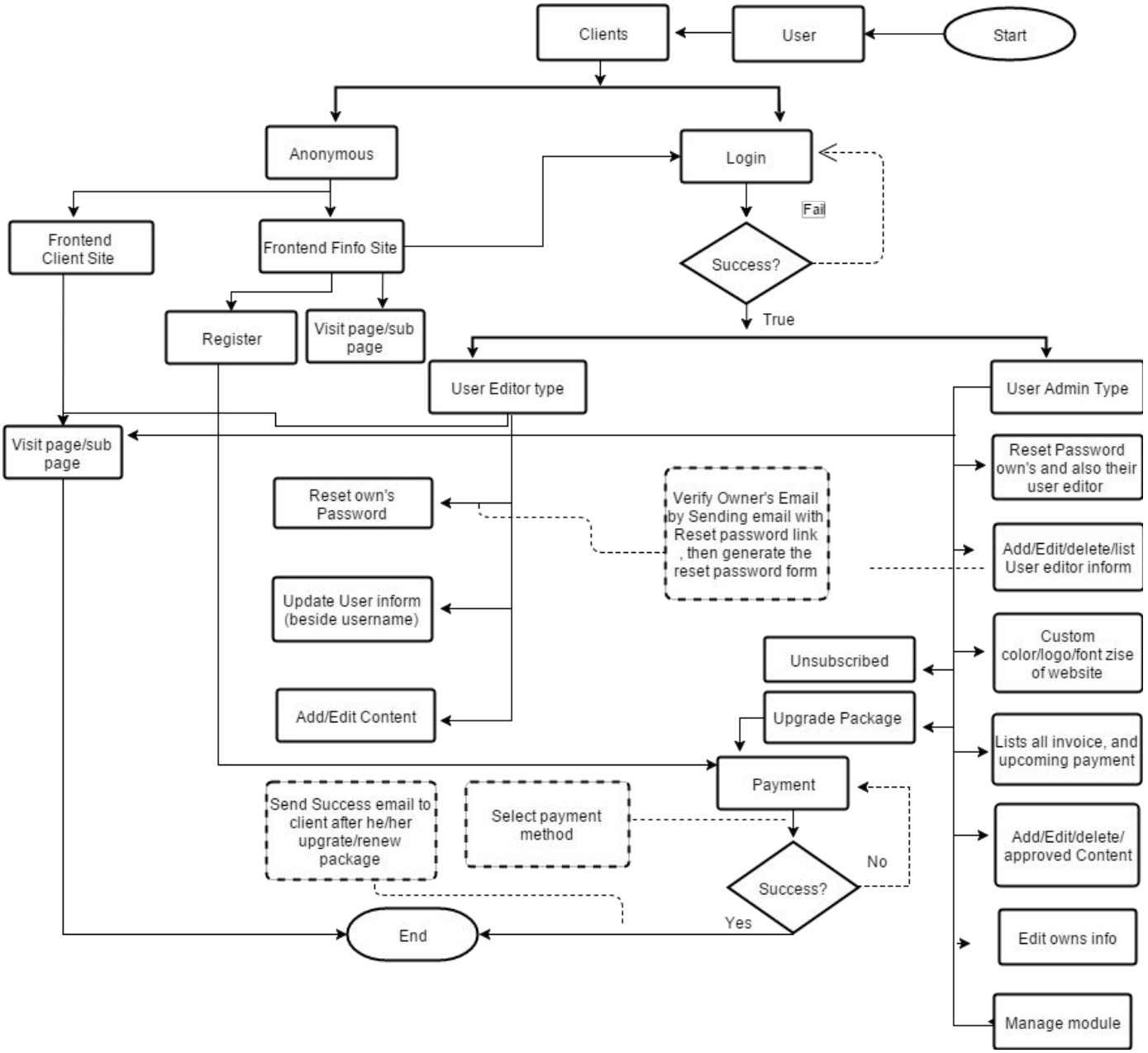
No.	Name of Field	Type	Mandatory	Minimum	Maximum	Validation Required
2	email_address	text	Yes	5	50	required/ check if it is a valid email
3	password	password	Yes			required

6- Flow Chart

a. FINFO



b. Client


Clients
User
Start
Anonymous
Login
Fail
Frontend Client Site
Frontend Finfo Site
Success?
Register
Visit page/sub page
True
User Editor type
User Admin Type
Visit page/sub page
Reset Password own's and also their user editor
Reset own's Password
Verify Owner's Email by Sending email with Reset password link , then generate the reset password form
Add/Edit/delete/list User editor inform
Update User inform (beside username)
Unsubscribed
Custom color/logo/font zise of website
Add/Edit Content
Upgrade Package
Lists all invoice, and upcoming payment
Payment
Send Success email to client after he/her upgrate/renew package
Select payment method
No
Add/Edit/delete/ approved Content
Success?
Yes
End
Edit owns info
Manage module