

Project Initiation Document

Newsfish Content Management system

Client: Downsview Advocate



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1 Document Information

1.1 Document Authors

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1.2 Revision History

Version	Date	Note
1.0	June 23, 2017	First Draft
2.0	August 4, 2017	Final Version

1.3 Document Approvals

Date:

X

Name of Client/Rep
Company Name

1.4 Document Purpose

The purpose of this document is to provide the specifications for the system. It will describe what the system will look like, as well as define the features the system will be able to perform.

2 Project Overview

2.1 Project Description (including Project Background)

This project is for the Downsview Advocate newspaper. It is a content management system. Right now, the workflow is like this: the writers submit articles to the editor in various forms. The editor arranges all the articles to the realtimeboard web app and blocks off. The sales manager puts all the ads on and blocks off too. The editor and sales manager upload the articles and ads to google drive. The designer checks the space arrangement from realtimeboard and grabs the contents from the google drive and designs. There are a lot of human labours and cost a lot of time.

The new system will place all the contents into one database management system. This system allows the writers to upload the articles, the photographers to upload the photos, the editor to grab and modify the contents, and the sales manager to upload the advertisements via browser. This system guarantees the latest version of the content. Content edit histories will be stored and can be traced. The system also displays the articles online, schedules options, publishes the content to social media and embeds in processing the Metadata entry and optimization tools.

2.2 Positioning

2.2.1 The Business Opportunity

This system has given the opportunity to develop a computerized system for the Downsview Advocate, whose workflow is currently based on google drive.

2.2.2 Problem Statement

Problem of	Current contents managements and web publication are inefficient, error-prone and cause unnecessary labor cost
Affects	Editor, sales manager, and designer
The Impact of which is	Limit the team to improve the quality of publication
A successful solution would	Perform a content management system that allow editors to plan the print publication content, manage print page space and manage web content publication in an automated way

2.3 Stakeholders and Users

2.3.1 Stakeholders

Stakeholder	Type of User
Manager	User, Sponsor
Editor	User
*Administrator	User
Sales Manager	User
Writers	User
Photographers	User
Designer	User
Developers	Developer

***NOTE: Administrator is the system administrator, not management administrator**

2.3.2 Stakeholder and User Needs

Actor	Description
Manager	Oversees all the operations
Editor	Oversees all the content in terms of the articles
Administrator	Manages the system
Sales manager	Submits all of the advertisements

Writers	Contribute contents
Photographers	Contribute photos
Designer	Designs ads and layout
Developers	Develop the system

2.3.3 Product Position Statement

For:	All staff members in Downsview Advocate
Who:	Requires one easier way to perform the content management
The:	"Newsfish" is a content management system
That:	Provides improved print content management and automated web content publication functions
Unlike:	Current manual management solution
Our Project	Will make complex processes simple and automated, greatly improve the efficiency of the current management system

2.3.4 Constraints

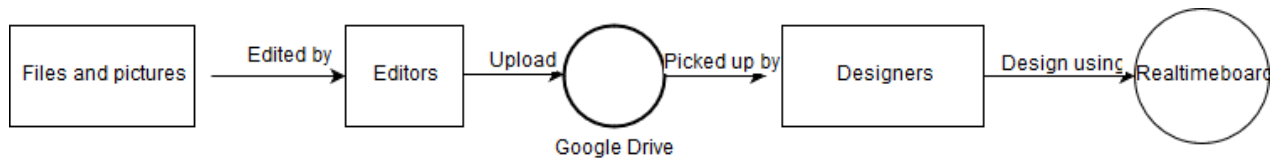
Constraint	Description	Workaround or Solution
Limited time to implement	Due to the eight month window for PRJ566 and PRJ666, developing the contents management system with a small team will require a lot of hard, dedicated work to create all the product components (database design, database implementation, web application UI design).	Due to our team members all have some experience on PHP and MySQL. We will choose matured LAMP technology to implements our design.

2.3.5 Operating Environment

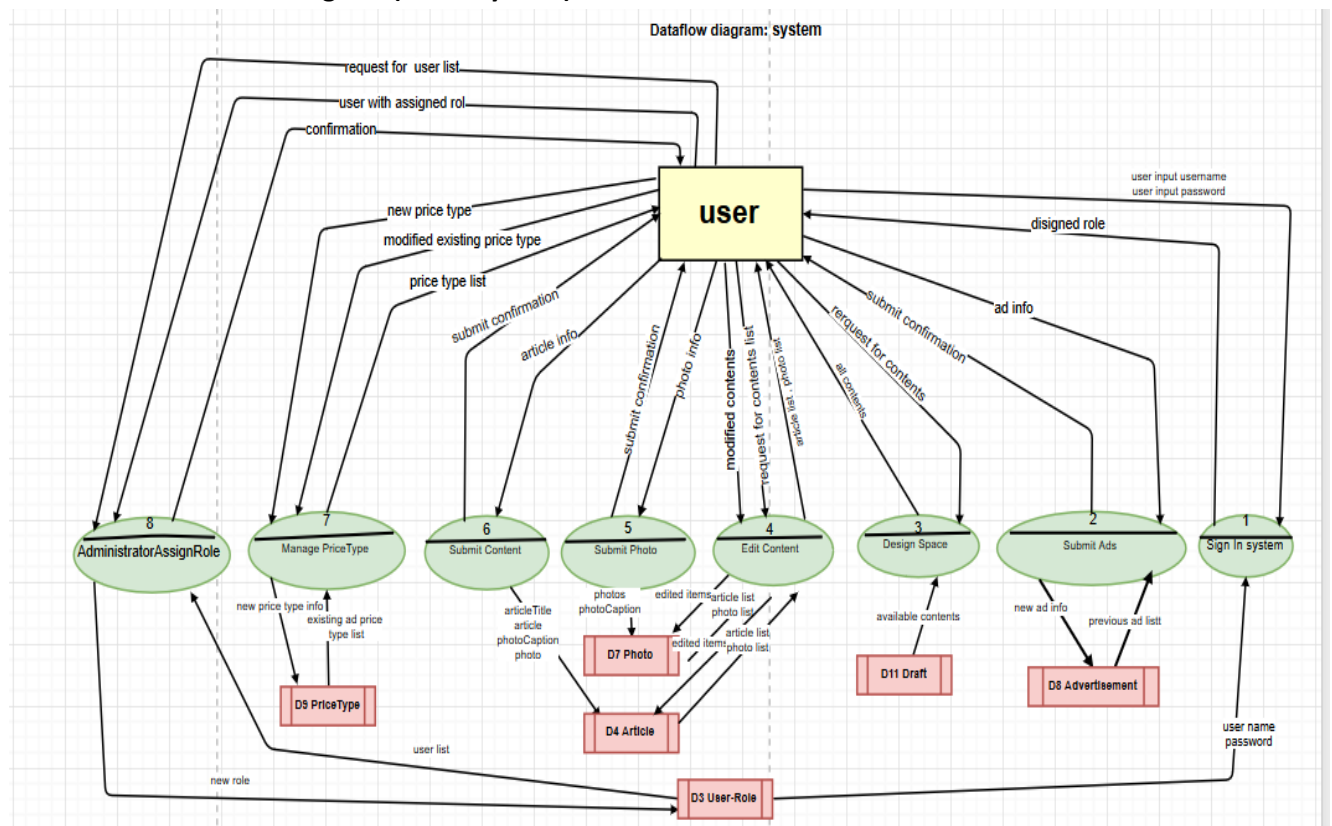
- LAMP –Linux, Apache, MySQL, and PHP(need to verify current system environment)

3 Process and Data Modeling

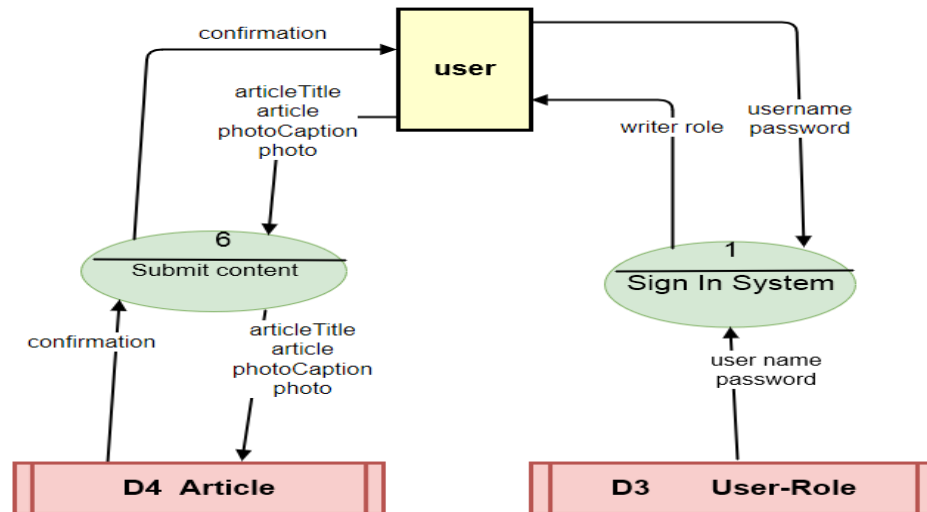
3.1 Data Flow Diagram (As Is System)



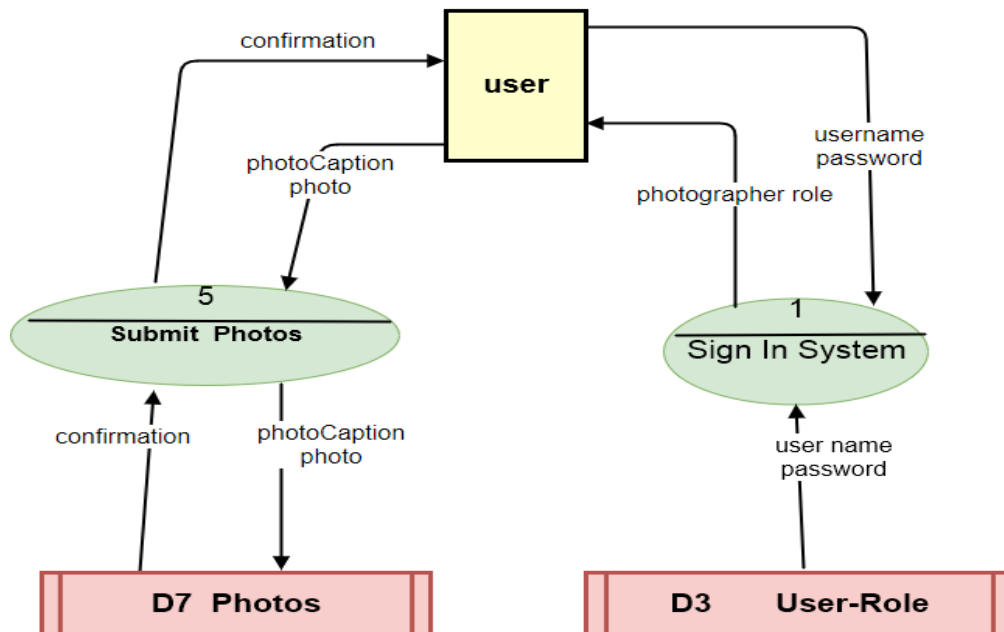
3.2 Data Flow Diagram (To Be System)



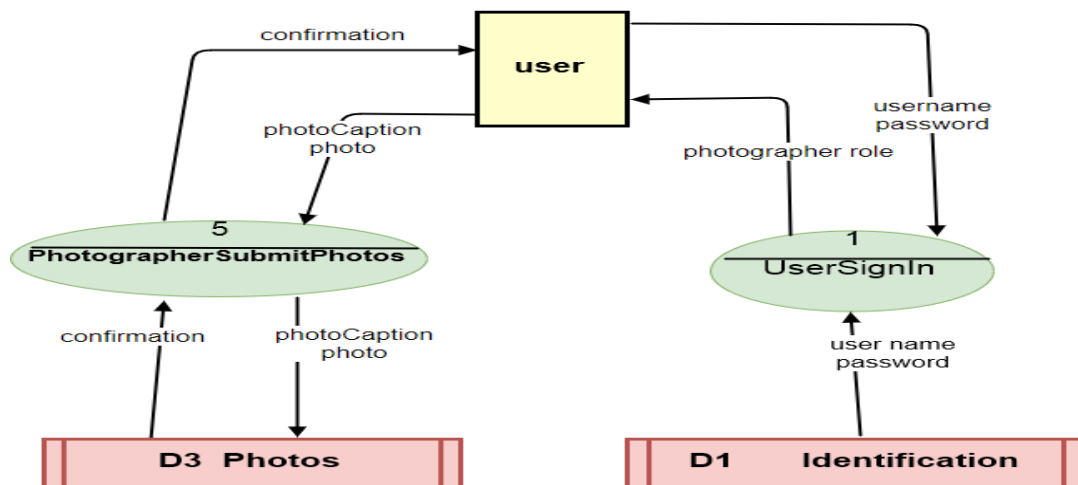
Dataflow diagram: WriterSubmitContent



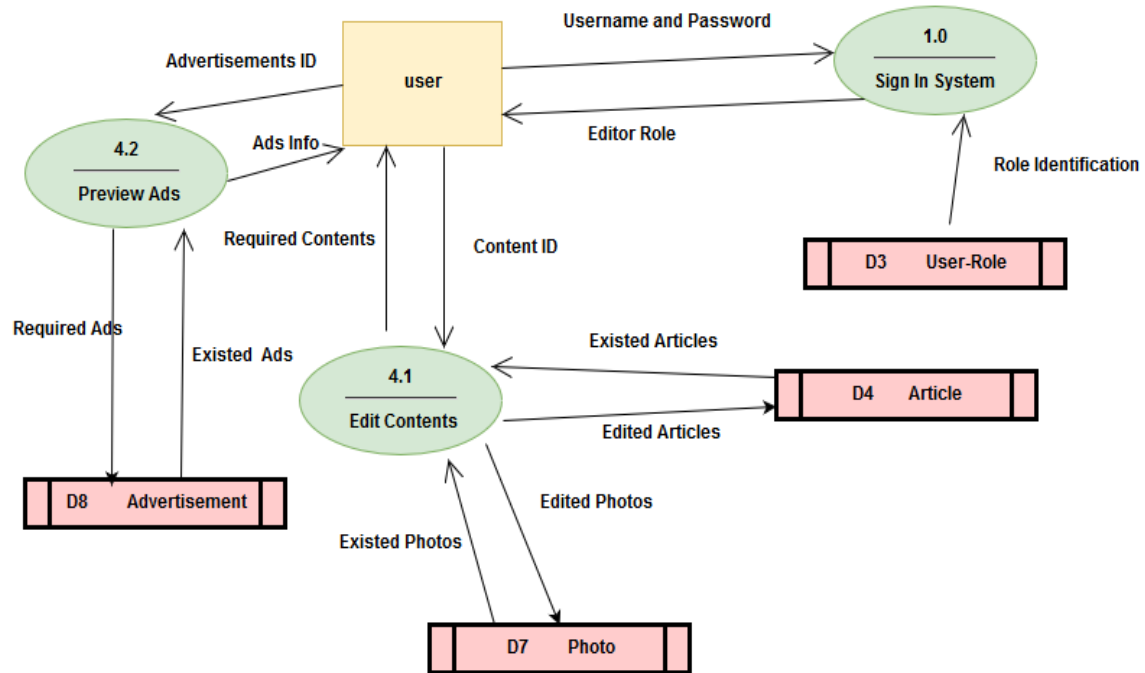
Dataflow diagram: PhotographerSubmitPhotos



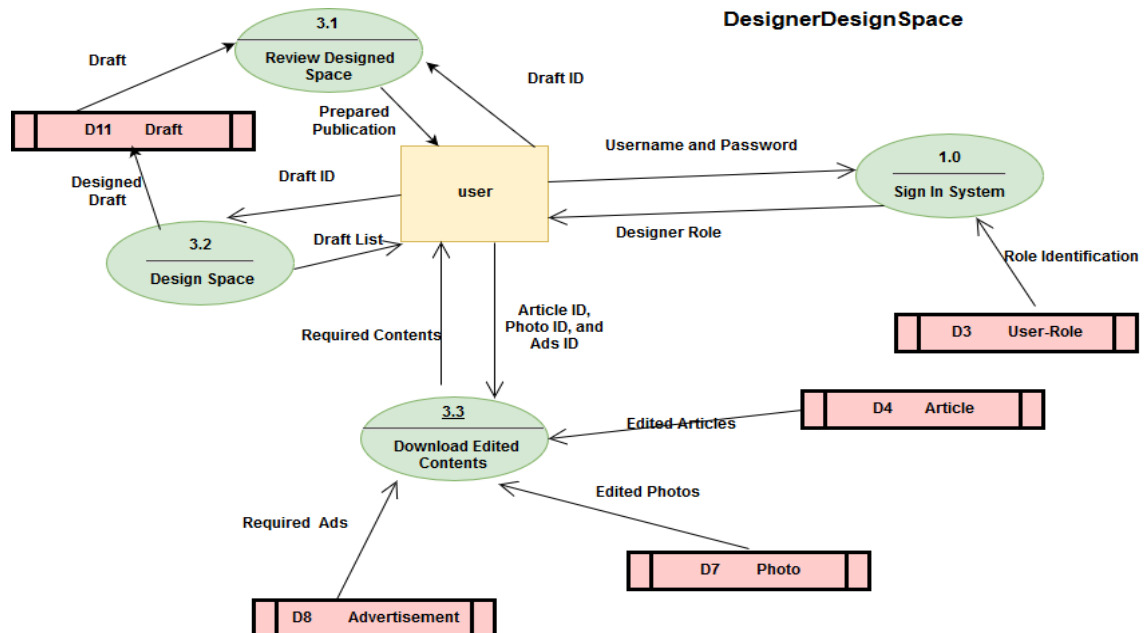
Dataflow diagram: PhotographerSubmitPhotos



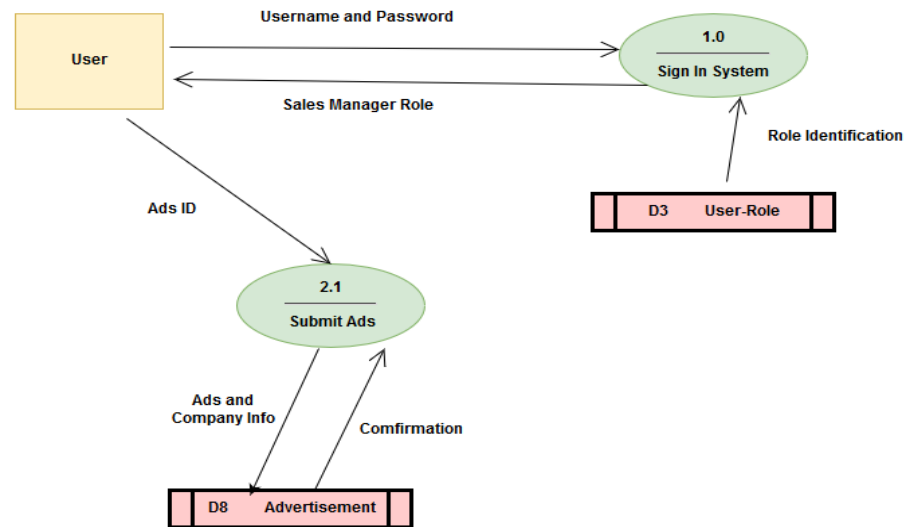
EditorEditContent



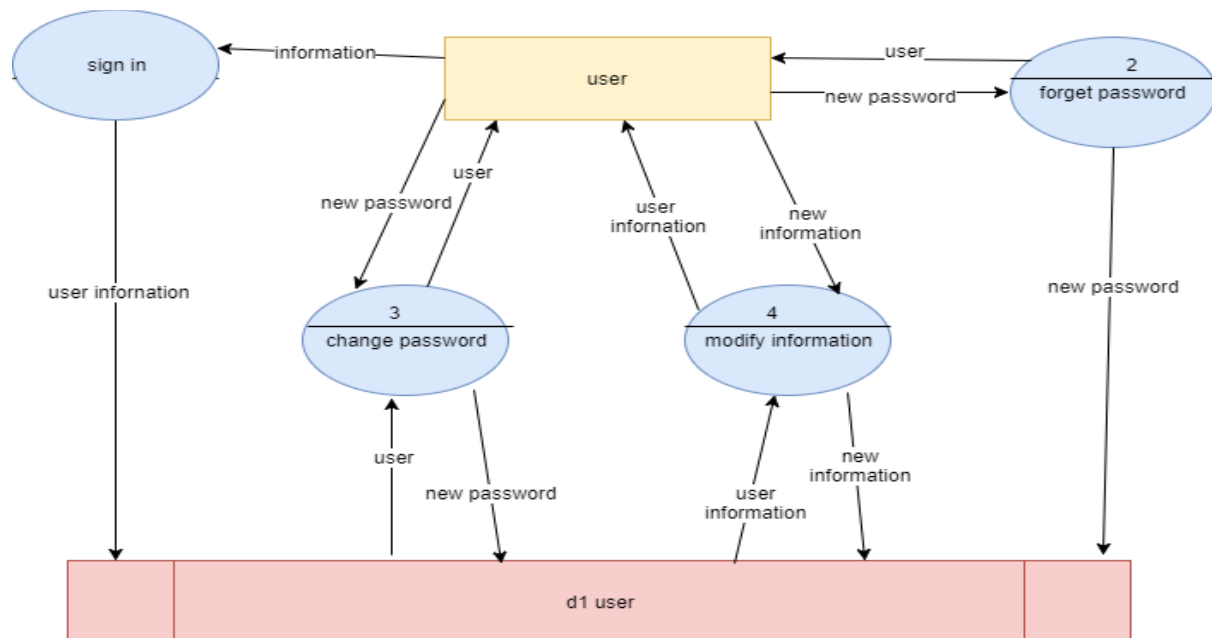
DesignerDesignSpace



SalesManagerSubmitAds



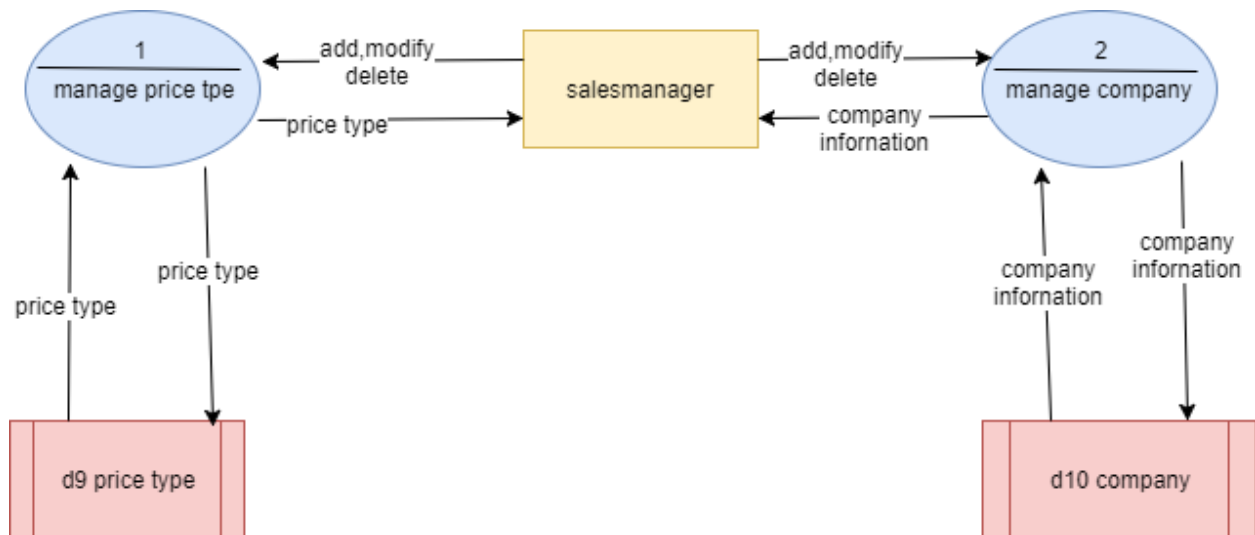
UserManagerInformation



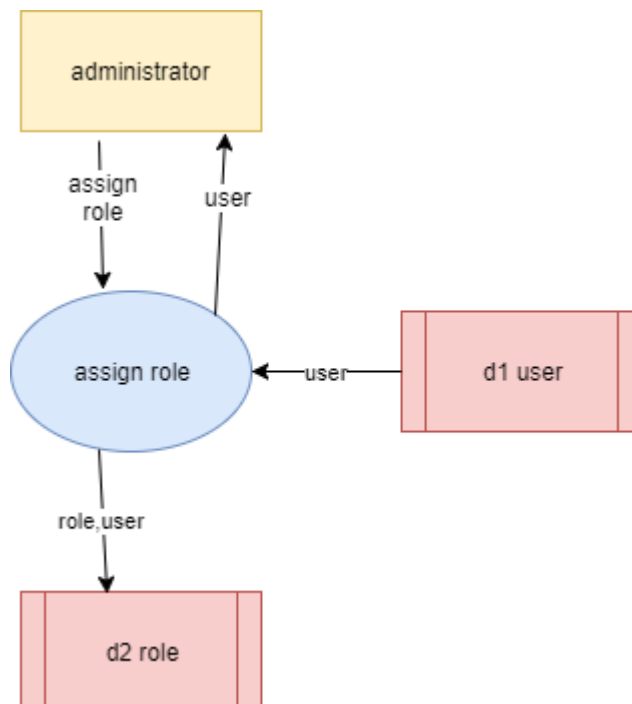


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SalesmanagerManagement



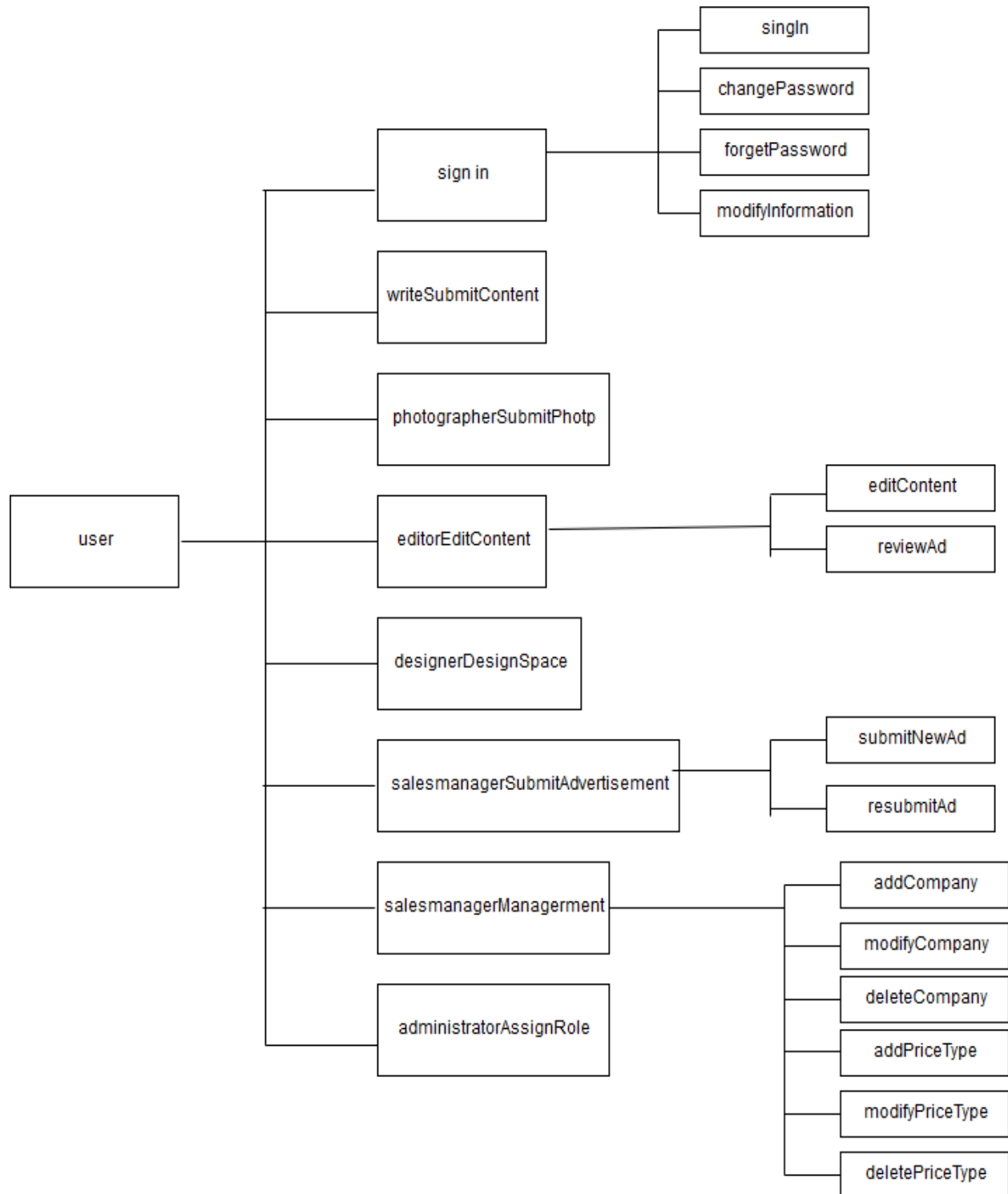
AdministratorAssignRole





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Work Breakdown Structure:





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4 Architecture

4.1 Technologies Used

LAMP - Linux Operation System

Apache HTTP Server

MySQL relational database management system

PHP

4.2 Operational Requirements

N/A

4.3 Performance Requirements

No requirement

4.4 Security Requirements

User account protected security system



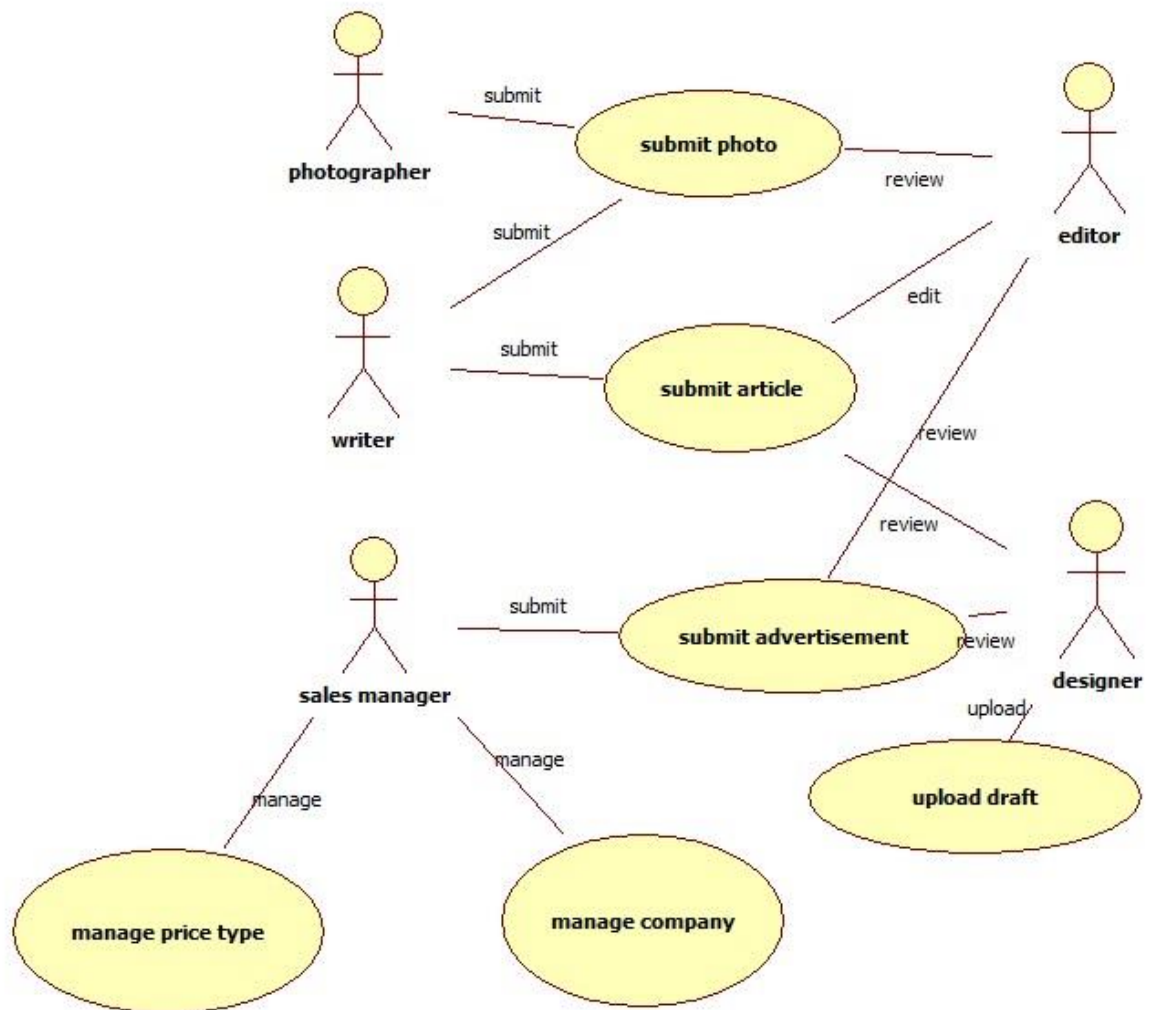
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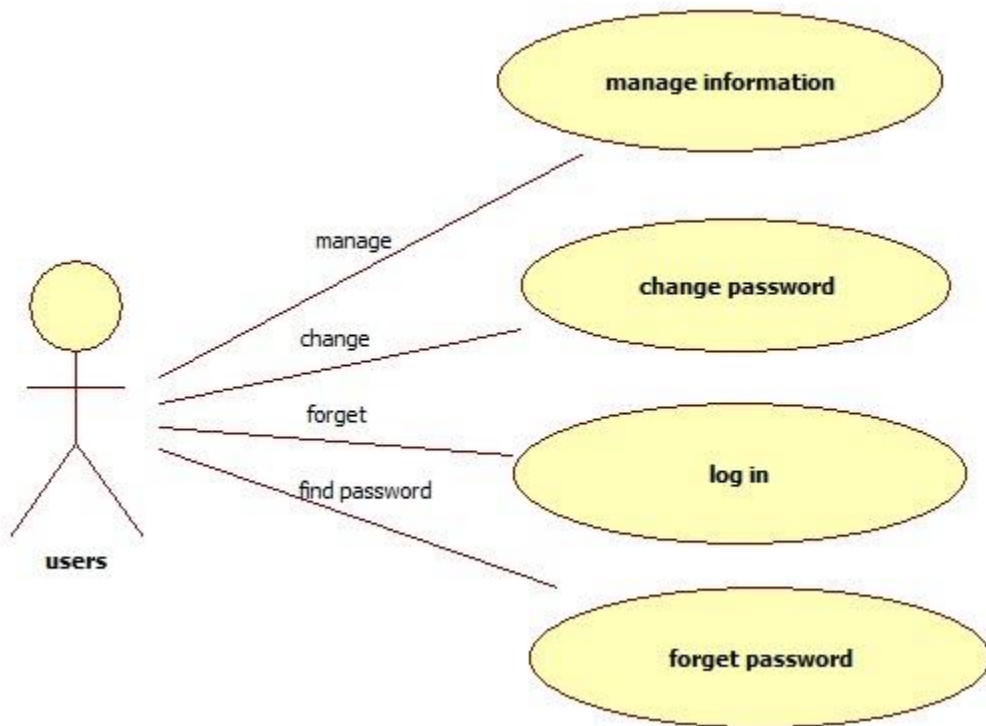
5 Design

5.1 Business Rules

Rule #	Description	Reference
1	The file format that writer submit must be MS word document or plain text format	
2	The contents must be edited before space design	
3	All the advertisement must be submitted only by the sales manager.	
4	Web version must be published after print version	
5	Content must has a title and photos must have captions	
6	Edit must be completed before deadline so the Designer have time to do space design	
7	User's email must be unique	
8	Company name is not empty	
9	Password and re-password must match	
10	Telephone number must be 10 digits	
11	PriceMin is less than priceMax, both of them are double	
12	Edit must be completed before deadline so the Designer have time to do space design	

5.2 Business Use Case Diagram





5.3 Use Case Specifications

5.3.1 Use Case Specification: writer submit contents

Identifier: WriterSubmitContent

Brief Description: This use case enables the writer to submit articles and photos

Section 1: Business Rule(s):

- Content must has a title
- The articles format must be MS word documents or plain text

Section 2: All Scenarios:

Scenario 1: writer submit contents

Precondition: writers must log in

	Actor(writer)	System	Data Used
1	Request upload article	Display submit form, prompting input title, photo caption, photo upload, file upload, article	userId
2	Fill the form and submit	Validate format, title, if success; If file is not MS document, parse article to photos and plain text, save the article's text and photo to database. If not, go to *A1	articleId, articleTitle, timestamp, article, photoId, file, photoCaption, photo

Alternative flow: A1

	Actor(writer)	System	Data Used
		Highlight invalid items, Hint actor to re-input items.	
1	Modify input items and resubmit	Go to main flow step 2	

Post Conditions: articles or photographs submitted and saved to the database

5.3.2 Use Case Specification: photographer submit photos

Identifier: PhotographerSubmitPhotos

Brief Description: This use case enables the photographers to submit photos

Section 1: Business Rule(s):

- photos must have captions

Section 2: All Scenarios:

Scenario 1: photographer submit photos

Precondition: photographer must log in

	Actor(photographer)	System	Data Used
1	Request upload photos	Display upload form, prompting upload photo caption, photo.	userId
2	Select photos and upload	Validate form, if success, save the content to database. If not, go to *A1	photoCaption, photo

Alternative flow: A1

	Actor(photographer)	System	Data Used
		Highlight invalid items, Hint actor to re-input items.	
1	Modify input items and resubmit	Go to main flow step 2	

Post Conditions: articles or photographs submitted and saved to the database

5.3.3 Use Case Specification: Editor edit contents

Identifier: EditorEditContents

Brief Description: This use case enables editor to edit contents, set editing status, set content other attributes such as location (page number of the print news page), web version location.

Section 1: Business Rule(s):

- Edit must be completed before deadline so the Designer have time to do space design

Section 2: All Scenarios:

Scenario 1: Editor edit the content

Precondition: Editor must log in

	Actor(editor)	System	Data Used
1	Request edit content	Display available articles list and photo list	articleId, articleTitle, photoId, photoCaption, photo,
2	Select a content to edit	Display article (if it is article allow edit text), list and allow available attributes to be editable	photoEditFinishOrNot

		If content is photo: editable attributes include: articleTitle, caption, photoEditFinishOrNot If contents is article: editable attributes includes: location, category, articleTitle, photos, articleEditFinishOrNot	location, category, articleTitle, photos articleEditFinishOrNot
3	Edit and submit	If content is article, move original article to history table and save edited article and attributes settings to database	articleTitle, photoCaption, article, category, location, articleId, historyTimeStamp

Post Conditions: contents and content attributes setting are edited and saved to the database

Scenario 2: editor review advertisement

Precondition: At the moment when the use case begins, the system is displaying the list of advertisement with a prompt of review

Actor	System	Data Used
request to review	display the advertisement detail.	advertisementId, companyName, companyAddress, name, email, phone, designOption, contentRevision, printOption, printSizeW, printSizeH, webSizeW, webSizeH, type
choose exit	display the list of advertisement	

5.3.4 Use Case Specification: Designer design space

Identifier: DesignerDesignSpace

Brief Description: This use case enables designer to pull out all final contents currently available in database and save design back to database

Section 1: Business Rule(s):

- All content must be edited by the Editor before space designing

Section 2: All Scenarios:

Scenario 1: Designer grab available contents

Precondition: Designer must log in

	Actor(designer)	System	Data Used
1	Request available contents for space design	Display all available edited contents list	
2	Select contents to download and request download	Pull out content from database and send to the designer	

Post Conditions: available contents are downloaded to the local computer

Scenario 2: Designer upload designed result to database

Precondition: Designer must log in

	Actor(designer)	System	Data Used
1	Request upload designed result	Display upload form	
2	Select the space designed file to upload And submit	Save the file to the database	

Post Conditions: space design file is uploaded to the database

Scenario 3: Designer Review Space Design Result

Precondition: Designer must log in

	Actor(designer)	System	Data Used
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1	Request review space design file	Display space design result file link, and allow download to local computer	
2	choose download file	Send space design result file to designer.	

Post Conditions: space design file is downloaded to the local computer

5.3.5 Use Case Specification: Sales manager submit advertisements

Identifier: SalesManagerSubmitAdvertisements

Brief Description: This use case enables sales manager to submit ads to database

Section 1: Business Rule(s):

- Only sales manager can submit the advertisements
- Company name is not empty

Section 2: All Scenarios:

Scenario 1: Sales manager submit new advertisement

Precondition: sales manager must log in

	Actor(Sales manager)	System	Data Used
1	Request submit new ads	Display submit form which must specify companyName, companyAddress, name, email, phone, designOption, content, printOption, printSizeW, printSizeH, webSizeW, webSizeH, priceType	
2	Upload ads, enter the companyName, companyAddress, name, email, phone designOption, content, printOption, printSizeW, printSizeH, webSizeW, webSizeH, priceType	Company name is not empty, print size is int, store the content into the system, display list of advertisement.	advertisementId,companyName, companyAddress, name, email, phone, designOption, content, printOption, printSizeW, printSizeH,webSizeW, webSizeH, priceType, timestamp

3	Choose exit	Display the list of advertisements	
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Post Conditions: New ads are submitted and saved to the database

Scenario 2: Sales manager resubmit previous advertisements

Precondition: sales manager must log in

	Actor(Sales manager)	System	Data Used
1	Request submit previous ads	Display the advertisement details with a prompt of resubmit	
2	Choose resubmit	Company name is not empty, print size is int, store the content into the system, display list of advertisement.	advertisementId, companyName, companyAddress, name, email, phone, designOption, contentRevision, printOption, printSizeW, printSizeH,webSizeW, webSizeH, priceType, timestamp
3	Choose exit	Display the list of articles	

Post Conditions: Previous ads are re-submitted and saved to the database

5.3.6 Use Case Specification: User sign in

Identifier: UserSignIn

Brief Description: This use case enables user regist to the system.

Section 1: Business Rule(s):

- User email must be unique
- Password & re-password must match
- Telephone number must be 10 numbers
- PriceMin is less than priceMax

- PriceMin and priceMax are both double

Section 2: All Scenarios:

Scenario 1: UserSignIn

Precondition: At the moment when the use case begins, the system displays home page

	Actor(User)	System	Data Used
1	Request to sign in	Display the sign in page	
2	Enter the email, password, re-password, first name, last name, address, telephone, facebook, twitter, role	Validate email address, if not go to *A1. Validate password , if not go to *A2. If all inputs are valid ,save to database, confirm new account is created, display log in page.	email, password, firstName, lastName, address, phone, faceBook, twitter, role

Alternative flow: A1

	Actor(User)	System	Data Used
		Display the account already exited. Please use another email address.	
1	Modify input email address and resubmit	Go to main flow step 2	

Alternative flow: A2

	Actor(User)	System	Data Used
		Display invalidation message	
1	Enter password and repassword	Go to main flow step 2	

Post Conditions: The user successfully signed in the system

Scenario 2: User Change Password

Precondition: User must log in

	Actor(User)	System	Data Used
1	Request to change the password	Display the change password page	
2	Enter the origin password, new password, re-password	System check the origin password is correct, the origin password does not match the new password, the password matches re-password, if not go to *A1. Update the new password. Display the welcome page.	password

Alternative flow: A1

	Actor(User)	System	Data Used
		Display invalidation message	
1	Enter password and repassword	Go to main flow step 2	

Post Conditions: User change password successfully

Scenario 3: User forget Password

Precondition: User does not log in the system

	Actor(User)	System	Data Used
1	Request “forget password”	Display the “forget password” page	
2	Enter the email	Validate email, if match, send an email with a link for changing the password. If not match, go to *A1	email
3	Input password, re-password	check the password matches the re-password, update to database. If not match, go to *A2	password

Alternative flow: A1

	Actor(User)	System	Data Used
		Display no such account, input email address again	
1	Modify input email address and resubmit	Go to main flow step 2	

Alternative flow: A2

	Actor(User)	System	Data Used
		Display invalidation message	
1	Enter password and repassword	Go to main flow step 2	

Successful Post Conditions: User changes password successfully

Scenario 4: User Modify Information

Precondition: User must log in the system

	Actor(User)	System	Data Used
1	Request to modify information	Display the user’s information	phoneNumber, firstName, lastName, facebook, twitter
2	Enter the	Update database, display welcome	email

	information	page	
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Post Conditions: user modify information successfully

Scenario 5: User login

Precondition: System must be on

	Actor(User)	System	Data Used
1	Request login	Display the login page	
2	Enter the user email and password	Validate email and password, if not match, go to *A1. If match, go to account welcome page	email, password

Alternative flow: A1

	Actor(User)	System	Data Used
		Highlight invalid input,	email, password
1	Enter email and password	Go to main flow step 2	

Post Conditions: User login successfully

5.3.7 Use Case Specification: Sales manager manage priceType and company information

Identifier: SalesManagerManagePriceType

Brief Description: This use case enables sales manager to manage the price type.

Section 1: Business Rule(s):

- priceMin must not greater than priceMax
- priceMin and PriceMax must be double

Section 2: All Scenarios:

Scenario 1: Delete PriceType

Precondition: Sales manager must log in, system displays the page with prompt of

manage price and manage advertisement

	Actor(Sales manager)	System	Data Used
1	Request to manage price type	Display the manage price type page with the list of price type and a prompt of add new	priceTypeId, priceType, priceMin, priceMax
2	Choose one type to delete	Confirm to delete	
3	Confirm to delete	Update database, display the manage price type page.	

Post Conditions: sales manager delete price type successfully

Scenario 2: ModifyPriceType

Precondition: Sales manager must log in, system displays the page with prompt of manage price and manage advertisement

	Actor(Sales manager)	System	Data Used
1	Request to manage price type	Display the manage price type page with the list of price type and a prompt of add new	priceTypeId, priceType, priceMin, priceMax
2	Choose one type to modify	Display the price type	
3	Enter new priceType, priceMin, priceMax	Verify the priceMin is less than the priceMax. If not, go to *A1. verify they are both double, if not goto *A2. update the database, display manager priceType page	priceTypeId, priceType, priceMin, priceMax

Alternative flow: A1

	Actor(sales manager)	System	Data Used
		Display priceMin should be not greater than priceMax	
1	Modify priceMin, priceMax	Go to main flow step 2	

Alternative flow: A2

	Actor(sales manager)	System	Data Used
		Display priceMin and priceMax should be double	
1	Modify priceMin, priceMax	Go to main flow step 2	

Post Conditions: sales manager modify price type successfully

Scenario 3: AddPriceType

Precondition: Sales manager must log in, system displays the page with prompt of manage price and manage advertisement

	Actor(Sales manager)	System	Data Used
1	Request to manage price type	Display the manage price type page with the list of price type and a prompt of add new	priceTypeId, priceType, priceMin, priceMax
2	Choose add new priceType	Display the add price type page	
3	Enter priceType, priceMin, priceMax	Verity the priceMin is less than the priceMax.if not, go to *A1. verity they are both double, if not goto *A2. save to the database, display manager pricetype page	priceTypeId, priceType, priceMin, priceMax

Alternative flow: A1

	Actor(sales manager)	System	Data Used
		Display priceMin should be not greater than priceMax,	
1	Modify priceMin, priceMax	Go to main flow step 2	

Alternative flow: A2

	Actor(sales manager)	System	Data Used
		Display priceMin and priceMax should be double	
1	Modify priceMin, priceMax	Go to main flow step 2	

Post Conditions: sales manager add price type successfully

Scenario 4: DeleteCompany

Precondition: Sales manager must log in, system displays the page with prompt of manage company information

	Actor(Sales manager)	System	Data Used
1	Request to manage company information	Display the manage company page	companyId, companyName, companyAddress, name, email, phone
2	Choose one company to delete	Confirm to delete	
3	Confirm to delete	Update database, display the manage company page.	

Post Conditions: sales manager delete company successfully

Scenario 5: ModifyCompany

Precondition: Sales manager must log in, system displays the page with prompt of manage company

	Actor(Sales manager)	System	Data Used
1	Request to manage company	Display the manage company page with the list of company and a prompt of add new	companyId, companyName, companyAddress, name, email, phone
2	Choose one company	Display the modify company page	

	to modify		
3	Enter new companyName, companyAddress, name, email, phone	Validate form, update database. If any data is invalid, go to *A1	

Alternative flow: A1

	Actor(sales manager)	System	Data Used
		Highlight the invalidated data	
1	Enter data	Go to main flow step 2	

Post Conditions: Sales manager modify company successfully

Scenario 6: AddCompany

Precondition: Sales manager must log in, system displays the page with prompt of manage company

	Actor(Sales manager)	System	Data Used
1	Request to add company	Display add company page	
2	Enter company information	Validate form, update database. If any data is invalid, go to *A1	companyName, companyAddress, name, email, phone

Alternative flow: A1

	Actor(sales manager)	System	Data Used
		Highlight invalid data	
1	Enter data	Go to main flow step 2	

Post Conditions: Sales manager add company successfully

5.3.8 Use Case Specification: Administrator assign role

Identifier: AdministratorAssignRole

Brief Description: This use case enables administrator to assign the roles.

Section 1: Business Rule(s):

Section 2: All Scenarios:

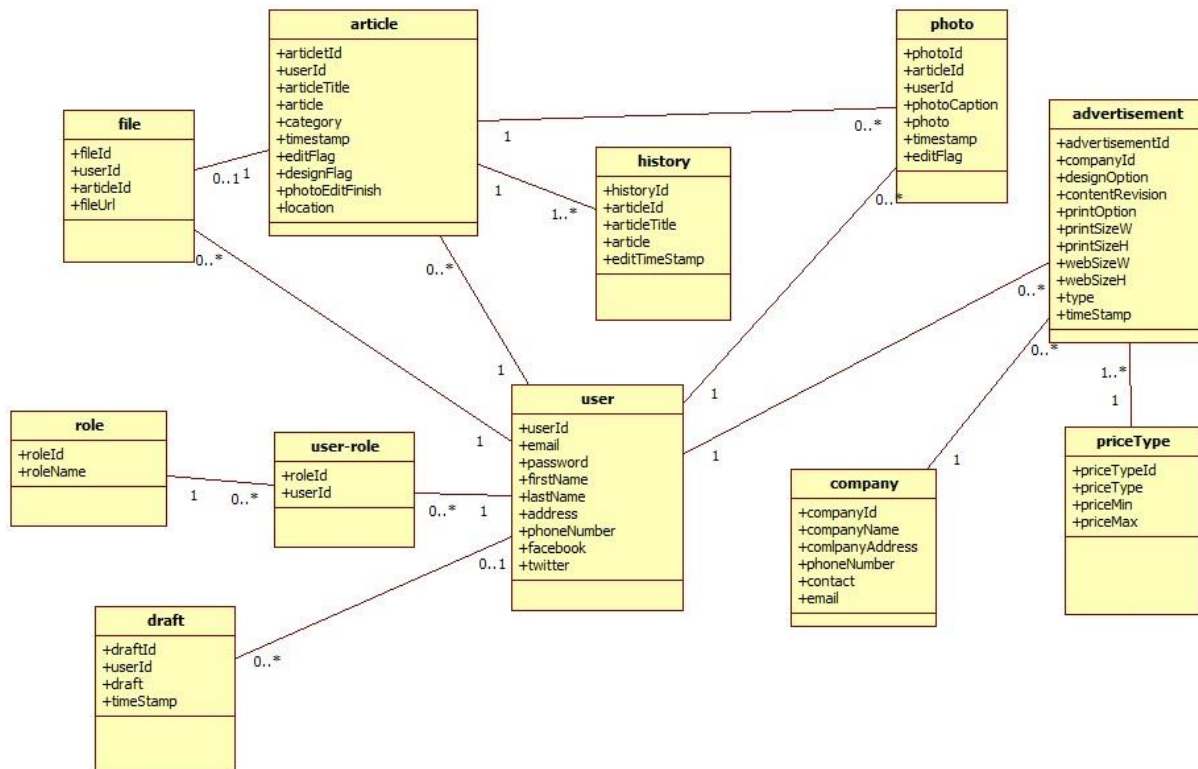
Scenario 1: Assign Role

Precondition: Administrator must log in, system displays the page with prompt of assigning roles

	Actor(Sales manager)	System	Data Used
1	Request to assign roles	Display the user list.	userId, firstName, lastName
2	Choose one user to assign	Display the role which the use already have, display the role list, add new role to the user or delete the role from the user	roleId
3	Confirm to assign	Update database, display the user list.	

Post Conditions: Administrator assign role successfully

5.4 Domain Class Diagram



6 Database Design

6.1 user

column name	type	default	constraint
userId	int	not null	pk
email	nvarchar	not null	unique



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password	nvarchar	not null	
firstName	nvarchar	not null	
lastName	nvarchar	not null	
address	nvarchar		
phoneNumber	nvarchar		
facebook	nvarchar		
twitter	nvarchar		

6.2 role

column name	type	default	constraint
roleId	int	not null	pk
roleName	nvarchar	not null	

6.3 user-role

column name	type	default	constraint
roleId	int	not null	pk,fk
userId	int	not null	pk,fk

6.4 article

column name	type	default	constraint
articleId	int	not null	pk
userId	int	not null	fk



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articleTitle	nvarchar	not null	
article	nvarchar	not null	
category	nvarchar		
timeStamp	datetime	not null	
editFlag	boolean	0	
designFlag	boolean	0	
photoEditfinish	boolean	0	
location	nvarchar		

6.5 file

column name	type	default	constraint
fileId	int	not null	pk
userId	int	not null	fk
articleId	int	not null	fk
fileUrl	nvarchar	not null	

6.6 history

column name	type	default	constraint
historyId	int	not null	pk
articleId	int	not null	fk
articleTitle	nvarchar	not null	
article	nvarchar	not null	

6.7 photo

column name	type	default	constraint
photoId	int	not null	pk
articleId	int	not null	fk
userId	int	not null	fk
photoCaption	nvarchar	not null	
photo	blob		
timeStamp	datetime		
editFlag	boolean	0	

6.8 advertisement

column name	type	default	constraint
advertisementId	int	not null	pk
companyId	int	not null	fk
designOption	nvarchar		
contentRevision	nvarchar		
printOption	nvarchar		
printSizeW	nvarchar		
printSizeH	nvarchar		
webSizeW	nvarchar		
webSizeH	nvarchar		



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type	nvarchar		
timeStamp	datetime		

6.9 priceType

column name	type	default	constraint
priceTypeId	int	not null	pk
priceType	nvarchar	not null	
priceMin	decimal		
priceMax	decimal		

6.10 company

column name	type	default	constraint
companyId	int	not null	pk
companyName	nvarchar	not null	
companyAddress	nvarchar		
phoneNumber	char(10)		
contact	nvarchar		
email	nvarchar		

6.11 draft

column name	type	default	constraint
draftId	int	not null	pk
userId	int	not null	fk

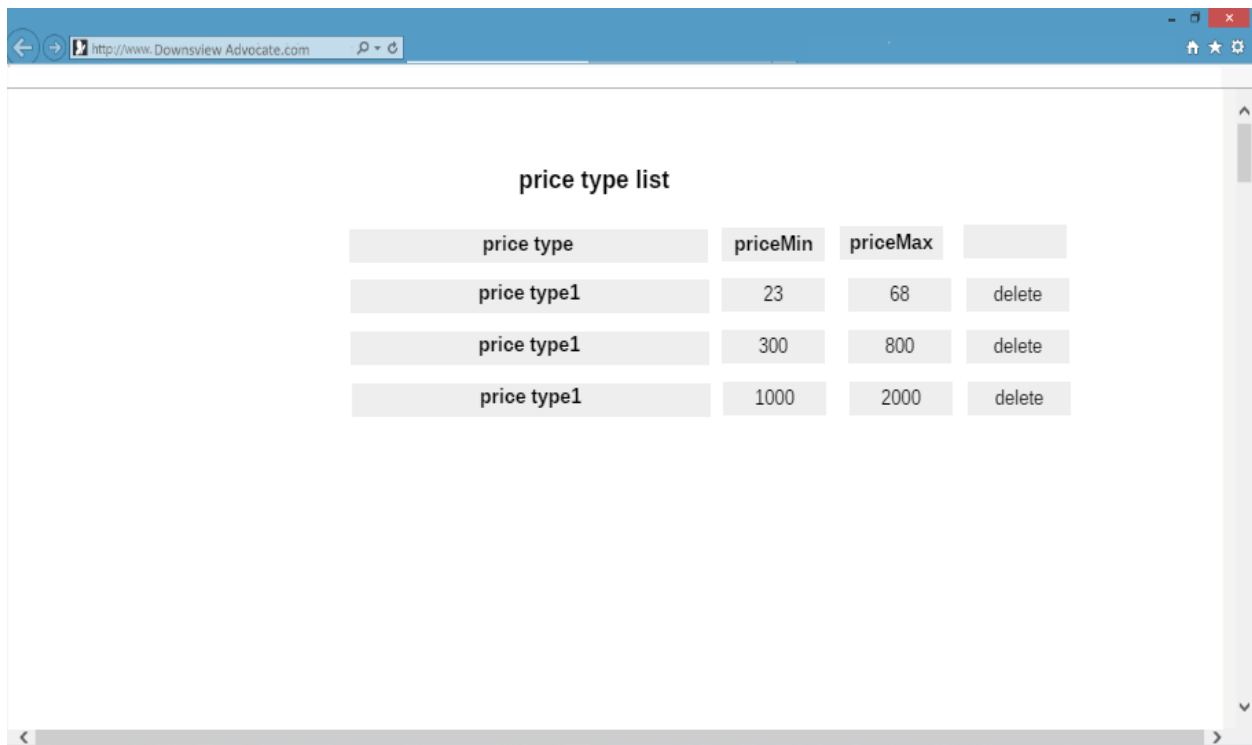


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draft	blob		
timeStamp	datetime		

7 Interface Mock-ups

Sales Manager Delete Price Type





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Sales Manager Modify Price Type

http://www.Downsview Advocate.com

Modify price type

price type	
price type1	edit
price type1	edit
price type1	edit

http://www.Downsview Advocate.com

Modify price type

price type	price type1
priceMin	300
PriceMax	1000

submit



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Sales Manager Add Price Type

← → http://www.Downsview Advocate.com

price type list

price type	priceMin	PriceMax
price type1	300	1000
price type2	500	5000
price type3	100	1000

add new price type

← → http://www.Downsview Advocate.com

Add new price type

price type

priceMin

PriceMax

submit

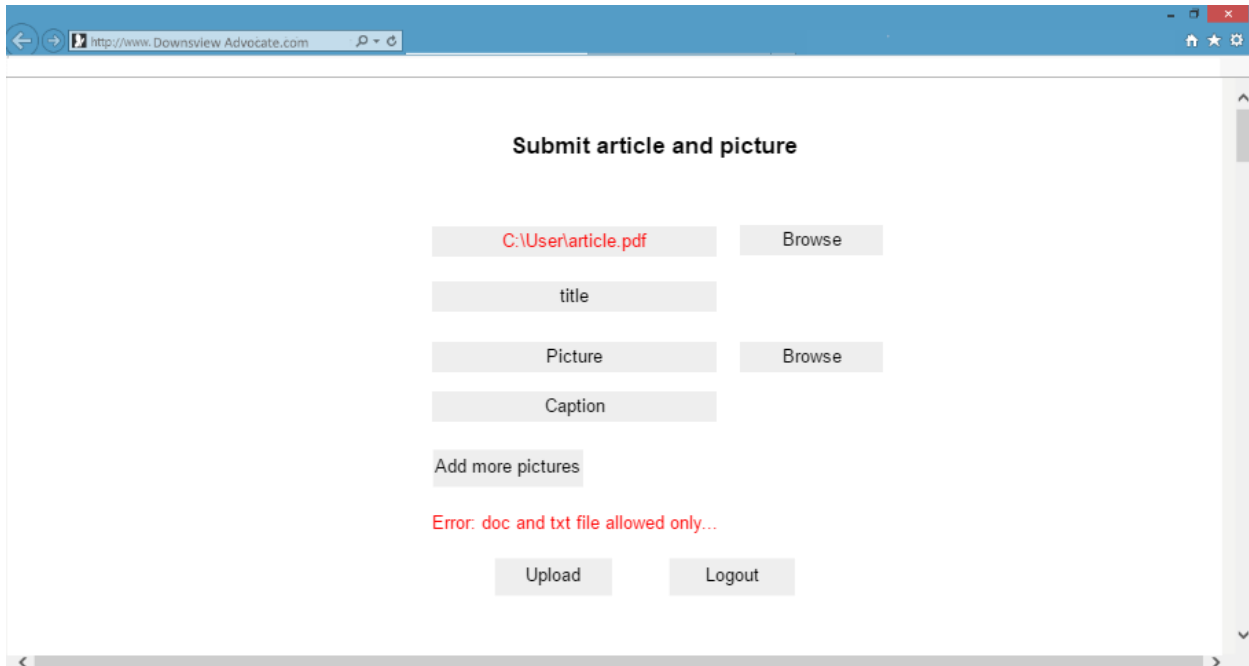


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Writer uploads contents

A screenshot of a web browser window showing the 'User log in' page. The browser's address bar displays 'http://www.Downsview Advocate.com'. The page has a white background with a blue header bar. The title 'User log in' is centered at the top. Below it, there are two input fields: 'Username' and 'Password', each with a label and a text box. Under the 'Password' field is a 'Login' button. To the right of the 'Login' button is a 'Register' button. Below the 'Login' button is a blue link labeled 'Forgot...?'. The browser window includes standard navigation buttons (back, forward, home, star, settings) and a scrollbar on the right.

A screenshot of a web browser window showing the 'Upload article' page. The browser's address bar displays 'http://www.Downsview Advocate.com'. The page has a white background with a blue header bar. The title 'Upload article' is centered at the top. Below it, there are several input fields and buttons. The first row has a 'file' input field and a 'Browse' button. The second row has a 'title' input field. The third row has a 'Picture' input field and a 'Browse' button. The fourth row has a 'Caption' input field. Below these is an 'Add more pictures' button. At the bottom, there are two buttons: 'Upload' and 'Logout'. The browser window includes standard navigation buttons (back, forward, home, star, settings) and a scrollbar on the right.



Submit article and picture

C:\User\article.pdf Browse

title

Picture Browse

Caption

Add more pictures

Error: doc and txt file allowed only...

Upload Logout

8 Acceptance Criteria

9 Implementation schedule for PRJ 666 - [MPP File](#)

	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Assigned to
1	★	Resource	15 days	Mon 11/09/17	Fri 29/09/17		Yongfu, Bo, Peng
2	★	install Apache	1 day	Mon 11/09/17	Mon 11/09/17		Yongfu, Bo, Peng
3	★	install MySQL	1 day	Mon 11/09/17	Mon 11/09/17		Yongfu, Bo, Peng
4	★	install PHP	1 day	Wed 13/09/17	Wed 13/09/17		Yongfu, Bo, Peng
5	★	create database	1 day	Thu 14/09/17	Thu 14/09/17	3	Yongfu, Bo, Peng
6	★	test the environment	1 day	Fri 15/09/17	Fri 15/09/17	2,3,4,5	Yongfu, Bo, Peng
7	★	HTML Model Page Design	5 days	Mon 18/09/17	Fri 22/09/17		Yongfu, Bo, Peng
8	★	Login In	2 days	Fri 15/09/17	Mon 18/09/17	2,3,4,5	Yongfu, Bo, Peng
9	★	CSS	3 days	Wed 27/09/17	Fri 29/09/17		Yongfu, Bo, Peng
10	★	Programming	30 days	Mon 02/10/17	Fri 10/11/17	1	
11	★	User Sign In	15 days	Mon 02/10/17	Fri 20/10/17	1	Peng
12	★	signIn	3 days	Mon 02/10/17	Wed 04/10/17		Peng
13	★	signin page	2 days	Mon 02/10/17	Tue 03/10/17		Peng
14	★	validation(Javascript)	1 day	Wed 04/10/17	Wed 04/10/17		Peng
15	★	forget password	4 days	Thu 05/10/17	Tue 10/10/17		Peng
16	★	validate user	1 day	Thu 05/10/17	Thu 05/10/17		Peng
17	★	send email	2 days	Fri 06/10/17	Mon 09/10/17		Peng
18	★	validation(Javascript)	1 day	Tue 10/10/17	Tue 10/10/17		Peng
19	★	change password	3 days	Wed 11/10/17	Fri 13/10/17		Peng
20	★	change password page	2 days	Wed 11/10/17	Thu 12/10/17		Peng
21	★	validation(Javascript)	1 day	Fri 13/10/17	Fri 13/10/17		Peng
22	★	modify information	2 days	Mon 16/10/17	Tue 17/10/17		Peng
23	★	modify page	1 day	Mon 16/10/17	Mon 16/10/17		Peng
24	★	validation(Javascript)	1 day	Tue 17/10/17	Tue 17/10/17		Peng
25	★	test	3 days	Wed 18/10/17	Fri 20/10/17		Peng
26	★	Writer Submit Content	15 days	Mon 02/10/17	Fri 20/10/17	1	Yongfu
27	★	welcome page	2 days	Mon 02/10/17	Tue 03/10/17		Yongfu
28	★	submit content page	4 days	Wed 04/10/17	Mon 09/10/17		Yongfu
29	★	read content from file	4 days	Tue 10/10/17	Fri 13/10/17		Yongfu
30	★	validation(Javascript)	2 days	Mon 16/10/17	Tue 17/10/17		Yongfu
31	★	test	3 days	Wed 18/10/17	Fri 20/10/17		Yongfu
32	★	Photographer Submit Photo	7 days	Mon 23/10/17	Tue 31/10/17	1	Yongfu
33	★	welcome page	1 day	Mon 23/10/17	Mon 23/10/17		Yongfu
34	★	submit photo page	3 days	Tue 24/10/17	Thu 26/10/17		Yongfu
35	★	validation(Javascript)	1 day	Fri 27/10/17	Fri 27/10/17		Yongfu
36	★	test	2 days	Mon 30/10/17	Tue 31/10/17		Yongfu
37	★	Editor Edit Content	8 days	Wed 01/11/17	Fri 10/11/17	1	Yongfu
38	★	edit content	4 days	Wed 01/11/17	Mon 06/11/17		Yongfu
39	★	welcome page	1 day	Wed 01/11/17	Wed 01/11/17		Yongfu
40	★	edit content page	2 days	Thu 02/11/17	Fri 03/11/17		Yongfu
41	★	validation(Javascript)	1 day	Mon 06/11/17	Mon 06/11/17		Yongfu
42	★	review advertisement	2 days	Tue 07/11/17	Wed 08/11/17		Yongfu
43	★	review ad page	2 days	Tue 07/11/17	Wed 08/11/17		Yongfu
44	★	test	2 days	Thu 09/11/17	Fri 10/11/17		Yongfu
45	★	Designer Design Space	12 days	Mon 02/10/17	Tue 17/10/17	1	Bo
46	★	display content page	5 days	Mon 02/10/17	Fri 06/10/17		Bo
47	★	download content	5 days	Mon 09/10/17	Fri 13/10/17		Bo
48	★	test	2 days	Mon 16/10/17	Tue 17/10/17		Bo
49	★	Salesmanager Submit Advertisement	10 days	Wed 18/10/17	Tue 31/10/17	1	Bo
50	★	submit new advertisement	4 days	Wed 18/10/17	Mon 23/10/17		Bo



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	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Assigned to
GANIT CHART	51	welcome page	1 day	Wed 18/10/17	Wed 18/10/17		Bo
	52	submit ad page	2 days	Thu 19/10/17	Fri 20/10/17		Bo
	53	validation(Javascript)	1 day	Mon 23/10/17	Mon 23/10/17		Bo
	54	▸ resubmit advertisement	4 days	Tue 24/10/17	Fri 27/10/17		Bo
	55	welcome page	1 day	Tue 24/10/17	Tue 24/10/17		Bo
	56	resubmit ad page	2 days	Wed 25/10/17	Thu 26/10/17		Bo
	57	validation(Javascript)	1 day	Fri 27/10/17	Fri 27/10/17		Bo
	58	test	2 days	Mon 30/10/17	Tue 31/10/17		Bo
	59	▸ Salesmanager Management	15 days	Mon 23/10/17	Fri 10/11/17	1	Peng
	60	welcome page	1 day	Mon 23/10/17	Mon 23/10/17		Peng
GANIT CHART	61	▸ add company	2 days	Tue 24/10/17	Wed 25/10/17		Peng
	62	add company page	1 day	Tue 24/10/17	Tue 24/10/17		Peng
	63	validation(Javascript)	1 day	Wed 25/10/17	Wed 25/10/17		Peng
	64	▸ modify company	2 days	Thu 26/10/17	Fri 27/10/17		Peng
	65	modify company page	1 day	Thu 26/10/17	Thu 26/10/17		Peng
	66	validation(Javascript)	1 day	Fri 27/10/17	Fri 27/10/17		Peng
	67	▸ delete company	2 days	Mon 30/10/17	Tue 31/10/17		Peng
	68	delete company page	2 days	Mon 30/10/17	Tue 31/10/17		Peng
	69	▸ add price type	2 days	Wed 01/11/17	Thu 02/11/17		Peng
	70	add price type page	1 day	Wed 01/11/17	Wed 01/11/17		Peng
GANIT CHART	71	validation(Javascript)	1 day	Thu 02/11/17	Thu 02/11/17		Peng
	72	▸ modify price type	2 days	Fri 03/11/17	Mon 06/11/17		Peng
	73	modify price type page	1 day	Fri 03/11/17	Fri 03/11/17		Peng
	74	validation(Javascript)	1 day	Mon 06/11/17	Mon 06/11/17		Peng
	75	▸ delete price type	2 days	Tue 07/11/17	Wed 08/11/17		Peng
	76	delete price type page	2 days	Tue 07/11/17	Wed 08/11/17		Peng
	77	test	2 days	Thu 09/11/17	Fri 10/11/17		Peng
	78	▸ Administrator Assign Role	8 days	Wed 01/11/17	Fri 10/11/17	1	Bo
	79	welcome page	3 days	Wed 01/11/17	Fri 03/11/17		Bo
	80	assign role page	3 days	Mon 06/11/17	Wed 08/11/17		Bo
GANIT CHART	81	test	2 days	Thu 09/11/17	Fri 10/11/17		Bo
	82	▸ Test	20 days	Mon 13/11/17	Fri 08/12/17	10	Yongfu, Bo, Peng
	83	combine code	2 days	Mon 13/11/17	Tue 14/11/17		Yongfu, Bo, Peng
	84	test	5 days	Wed 15/11/17	Tue 21/11/17	83	Yongfu, Bo, Peng
	85	fix bugs	5 days	Wed 22/11/17	Tue 28/11/17	84	Yongfu, Bo, Peng
	86	final test	3 days	Wed 29/11/17	Fri 01/12/17	85	Yongfu, Bo, Peng