

Software Development Life Cycle (SDLC)

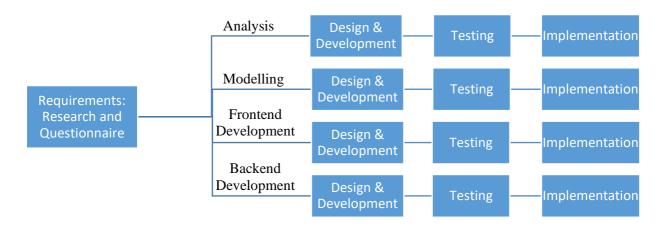
Disusun oleh:

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> LA06 Software Engineering

Software development life cycle (SDLC): Incremental model

Pada SDLC incremental model, proses pengerjaan software dilakukan pembagian sehingga bagian selanjutnya dikerjakan setelah bagian awal telah selesai hingga tahap terakhir sehingga menghasilkan software yang lengkap dan berfungsi dengan baik sesuai kebutuhannya.



Dari diagram di atas, SDLC yang terjadi adalah dimulai dari requirements yaitu dengan research dan questionnaire. Selanjutnya, berlanjut pada tahap analysis, modelling, backend development, dan frontend development yang dapat dilakukan secara parallel oleh orang berbeda sesuai perannya. Pada setiap tahap bagian tersebut terdapat proses design & development, testing, dan implementation yang dilakukan pertahap.

Tahapan SDLC:

1. Requirements: Research and questionnaire
Untuk mengetahui kebutuhan pembuatan software OpenRead, dilakukan research terlebih dahulu
dan questionnaire melalui survei yang telah dilaksanakan pada bulan November 2020.

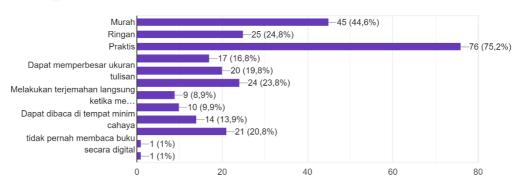
Beberapa pertanyaan serta respon yang diberikan yaitu:



Dari responden, sebanyak 48,5 % menyatakan sering membaca cerita melalui website/ mobile app. Hal ini menunjukkan software yang akan sesuai dengan minat pasar.

Dari beberapa pilihan dibawah, manakah yang menurut anda menjadi kelebihan membaca buku secara digital?

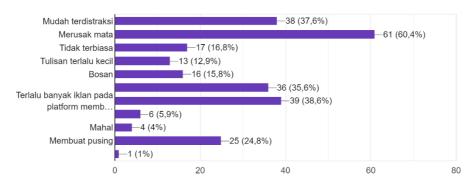
101 tanggapan



Dari survey, kelebihan paling utama untuk membaca buku secara digital yaitu praktis, murah, dan ringan.

Dari beberapa pilihan dibawah, manakah yang menurut anda menjadi kekurangan membaca buku secara digital?

101 tanggapan



Dari survey, kekurangan paling utama dari membaca buku secara digital yaitu merusak mata, terlalu banyak iklan, dan mudah terdistraksi. Untuk itu software OpenRead menawarkan tampilan yang nyaman untuk mata dan terdapat fitur berlangganan agar pembaca tidak perlu khawatir dengan banyaknya iklan.

Kesimpulan:

Berdasarkan survey yang telah dilaksanakan software OpenRead menawarkan kepraktisan untuk membaca secara digital yang sesuai dengan keinginan pasar. Selain itu, beberapa kekurangan yang mungkin muncul sudah dirancangkan solusinya.

2. Design & deployment

Pada tahap ini dibagi menjadi 3 bagian sesuai dengan SDLC modelnya:

Analysis

Tahap analysis menganalisa berdasarkan respon pasar dan juga kemampuan pembuat software. Dari kedua hal tersebut dibuat planning pembuatan software dan dokumen yang diperlukan.

Di tahap ini pula dilakukan pembagian tugas sesuai dengan planning yag dilakukan.

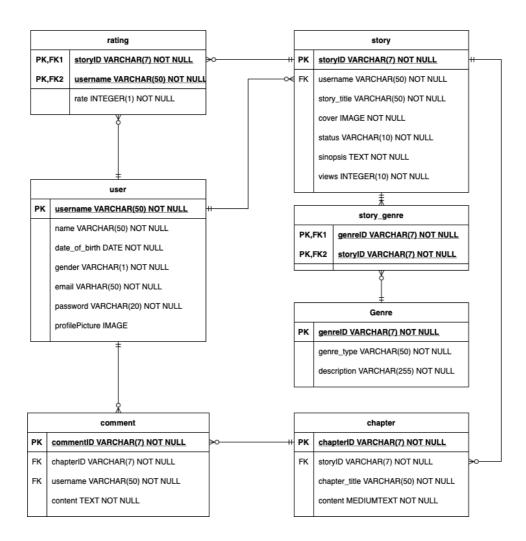
Planning:

Task	Sub Task	PIC	September		October		November			December			January					
	Sub rask	PIC	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
Requirement Engineering	Research	PM		0	0													
	Questionnaire	PM			О													
	SRS	PM				O	О			O	O	О	O					
Analisis	Process Analayis	SA								O	O							
	System's Diagram	SA								O	O							
Modeling	User Interfaces	Designer									O	O	O					
Backend Development	Initialize Project	Dev BE													О			
	Integration	Dev BE																О
Frontend Development	Home Page	Dev FE													О	O		
	Navigation Bar	Dev FE														0		
	Story Pages	Dev FE														O	О	
	Profile Pages	Dev FE														0	0	
Testing Integration	Testing	QA																0

• Modelling

Modelling yang dilakukan disesuaikan dengan survey pasar yaitu tampilan yang nyaman untuk membaca dan juga pembuatan diagram yang diperlukan.

ERD OpenRead



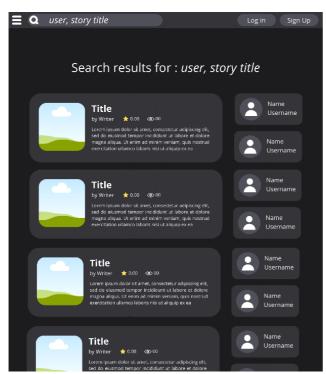
User Interfaces:



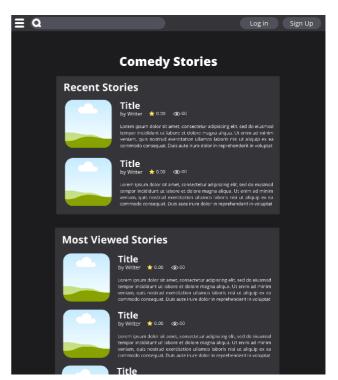


Home page

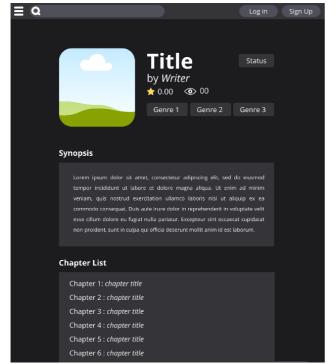
Side menu home page



Search results



Story pada genre



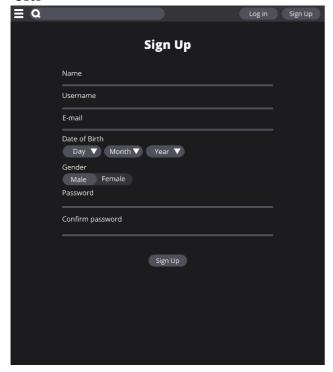
Story Title
Chapter xx : chapter title

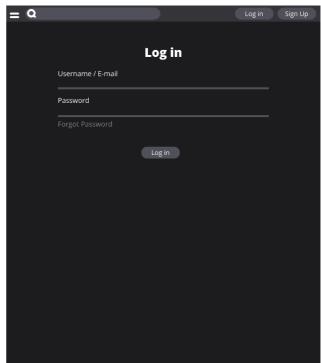
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Pilihan chapter untuk read story

Read story

User



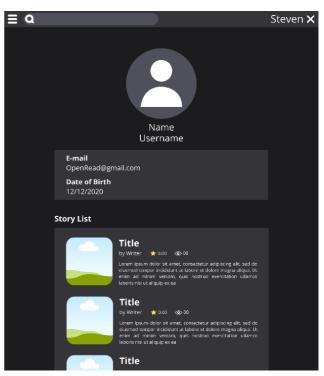


Sign up page

Log in page



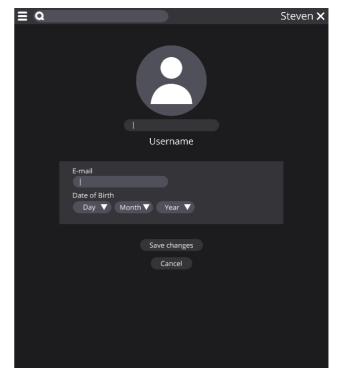
Side menu pada home page



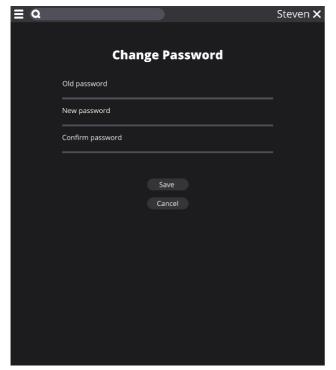
Profile user oleh user lain



Profile user



Edit profile



Title
by Writer

Send

© 00

Genre 1 Genre 2 Genre 3

Synopsis

Larem ipsum dolor sit amet, consectetur adipiscing elit, sed do eusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequar. Duis aute inure dolor in reprehendent in voluprate velit esse allum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidarat non proident, sunt in cuipa qui officia deserunt molit anim id est laborum.

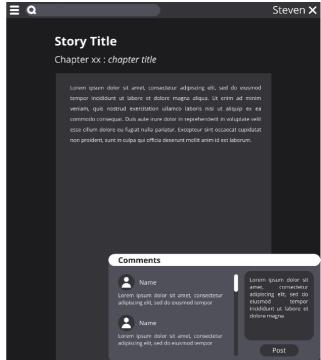
Chapter List

Chapter 1: chapter title
Chapter 3: chapter title
Chapter 4: chapter title
Chapter 5: chapter title
Chapter 6: chapter title
Chapter 6: chapter title
Chapter 6: chapter title

Change password

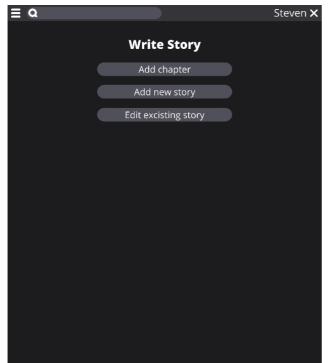
Pilihan chapter untuk read story





Read story

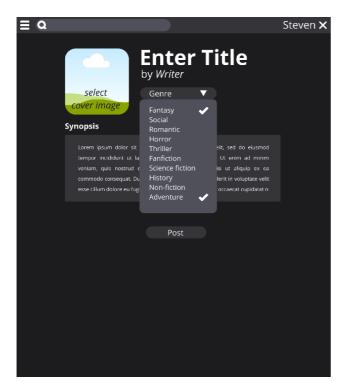
Comment section





Pilihan untuk write story

Write new story



Pilihan genre write new story



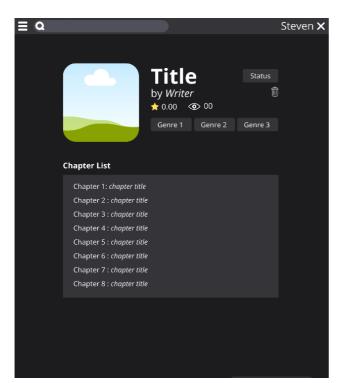
Pilihan story untuk add chapter





Add chapter

Pilihan story untuk diedit





Pilihan chapter edit story

Edit story

• Frontend development

Tahap ini membuat pengubahan dari data ke antarmuka grafis melalui penggunaan program untuk software. Bagian ini merupakan bagian yang langsung dilihat oleh user. User juga bisa langsung berinteraksi pada bagian ini.

```
## chapterblade.php X

Code > OpenRead > resources > wiews > user > reader > ## chapterblade.php > @ tyle

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Code > OpenRead > resources > wiews > user > reader > ## chapterblade.php > @ div*comment*/

Code >
```

• Backend development

Tahap ini membuat bagian belakang layer dari sebuah website dalam bentuk code.

3. Testing

Pada tahap testing, dilakukan pengujian terhadap segala bidang bagian. Baik analysis, modelling, frontend development, maupun backend. Testing ini bertujuan untuk mengetahui adakah bagian dari sotware ini yang sekiranya masih perlu diperbaiki.

Testing plan yang dilakukan adalah:

Test Environment

- Browser on Desktop
- Browser on Mobile

Function Testing

Function	Register Account
Description	Page of Registering Account whenever a
	visitor pressed Sign Up. Visitor must input
	their desired username, email, password, and
	date of birth.
Success Criteria	>Inputted data is successfully registered on
	Database
	>There can be no duplicate
	email/username registered.

D C	Function	Login
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Description	Page of Login whenever a user pressed Login. User must input their username/email and password that they have registered.
Success Criteria	>Authentication is working (When wrong password is entered, it won't direct to the home page of user) >Direct to the homepage with status Logged In as user.

Function	Search Story
Description	Page of searching story that the user/visitor
	desired.
Success Criteria	>Keyword should be appearing in any of the search result >If keyword doesn't present in any of the story in the database, "No results found" shall
	appear.

Function	Write Comments
Description	Section of a story where user can writes their
	comments about the story/chapter.
Success Criteria	>Comment should be registered to the
	database.
	>Comment should appear in the story/chapter
	page.

Function	Update Comments
Description	Section of a story where user can edit their
	comments about the story/chapter.
Success Criteria	>New comment should be registered to the
	database.
	>Old comment should be deleted from the
	database
	>New Comment should appear in the
	story/chapter page.

Function	Rate Story
Description	Section of a story where user can rate 1-5
	about the story.
Success Criteria	>Rating should be registered to the
	database.
	> If the user has rated before, and he/she
	wished to rate again, the old rating will be
	deleted and the new rating will be registered
	from the database.
	> Rating of the story should change
	according to the average of the total
	rating.

Function	Edit Profile
Description	Page of editing profile where user that has
	logged in can edit change their profile picture,
	email, and name.
Success Criteria	>New data should be registered in the
	database.
	>Old data should be deleted from the
	database.
	>If the name is changed, the Hello,(name)
	from right top section of the page should
	change immediately.

Function	Change Password
Description	Page of change password where user can
	change their password
Success Criteria	>Authentication must be valid (Current password must be the same from database) >Current Password is deleted and New Password is registered to the database. >Current Password (Old Password) shouldn't be able to be used again to log in.

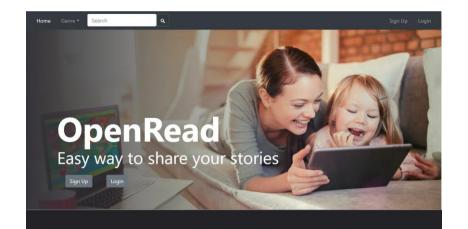
Function	Write Story
Description	Page of write story where user can write story
Success Criteria	>Visitor shouldn't be able to write story >Inputed Data is registered correctly to the database (Cover Picture, Title, Genre, Synopsis) >Writer's name is the same as the user's name.

Function	Edit Story
Description	Page of edit story where user can edit the
	story/chapter.
Success Criteria	>Old content will be deleted and the new content will be registered from the database. >Old content should not be showing up immediately after the page has been refreshed. >New content should show up immediately after the page has been refreshed.

4. Implementation

Terakhir, pada tahap ini dilakukan implementasi dari segala yang telah dibuat dan juga telah memperbaiki hal yang kurang dalam tahap testing. Hasil dari tahap ini merupakan bentuk final dimana software yang dibuat sudah dapat digunakan oleh user.

Bentuk website yang dibuat:



Top Picks



Iron Man 1
by ironman ★ 3.60 6
Tony Stark, who has inherited to defense contractor Stark Industries for



Multivariate Statistics
by stevenla06 ★ 0.00 ◆ 4
Multivariate statistics is a subdivis



story title
by devita

0.00

2 test test test



First Story
by anthonygt ★ 4.00 ® 1
This is a first story. It will make