Project Card

Project:

Social News Platform

Purpose:

The Social News Platform is a digital system that allows users to write, share and read news articles.

Stakeholder Card

Stakeholder:

User

Goal:

The User reads news articles written or shared by other users. Those who write and share articles are often journalists or activists.

Quality Attributes:

Usability – QA-Priority: 2
The system should be easy to use.
Security – QA-Priority: 1
The system should protect the information of the user from unauthorized access.
Performance – QA-Priority: 2
The system should be able to process and fulfill the users' requests fast.

Stakeholder Card

Stakeholder:

Owner

Goal:

The Owner will maintain the system during its lifetime.

Quality Attributes:

Availability – QA-Priority: 2
The system is to remain available to achieve a high uptime.
Security – QA-Priority: 0
The system should protect the information of the user from unauthorized access.
Maintainability – QA-Priority: 1
The system is to take a minimum amount of effort by the owner to maintain it.

Concern Card

Concern-ID:

1

Concern:

The users need to be able to upload articles on the platform. How will the system store these articles?

Options:

1. Store the articles in multiple distributed databases owned by the Owner.
Security (+), Performance (+), Availability (+), Maintainability (-)

2. Upload the articles in the cloud owned by an external cloud provider.
Security (-), Performance (+), Availability (+), Maintainability (+ +)

3. Store the articles in a single local database owned by the Owner.
Security (+), Performance (-), Availability (-), Maintainability (+)

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Concern Card

Concern-ID:

2

Concern:

The system needs to store user information and other information necessary for system operation, including ratings, reviews, comments. How will the system store this information?

Options:

1. Store the information in multiple distributed databases owned by the Owner.
Security (+), Performance (+), Availability (+), Maintainability (-)

2. Upload the information in the cloud owned by an external cloud provider.
Security (-), Performance (+), Availability (+), Maintainability (+ +)

3. Store the information in a single local database owned by the Owner.
Security (+), Performance (-), Availability (-), Maintainability (+)

Concern Card

Concern-ID:

3

Concern:

The system needs to store sensitive user credentials and personal information (e.g. payment data, login credentials, name). How will the system store this information?

Options:

1. Store the sensitive data in multiple distributed databases owned by the Owner.
Security (-), Performance (+), Availability (+), Maintainability (-)

2. Store the sensitive data in the cloud owned by an external cloud provider.
Security (- -), Performance (+), Availability (+), Maintainability (+ +)

3. Store the sensitive data in a single local database owned by the Owner.
Security (=), Performance (-), Availability (-), Maintainability (+)

Concern Card

Concern-ID:

4

Concern:

Users want to transfer payments to other users to compensate for their effort in writing or sharing articles

Options:

1. Outsource E-payment to an E-Payment service.
Usability (=), Maintainability (+), Security (-)

2. Integrate open source E-payment software solutions in the system (requires handling payment information / credentials internally by the system)
Usability (+), Maintainability (- -), Security (+ +)

3. Users log in their bank's website, enter the platform's payment information and authorize their bank to electronically transfer money.
Usability (- -), Maintainability (+ +), Security (+)

Concern Card

Concern-ID:

5

Concern:

Users want to be able to use the platform anonymously. How can the system let the user connect anonymously?

Options:

1. Implement onion routing in the network (TOR). Onion routing effectively hides information by using multiple layers of encryption.
Performance (-), Security (+ +), <?>

2. <?>
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3. <?>
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Concern Card

Concern-ID:

6

Concern:

Users need to retrieve the system's web content. Where will the system store its static content?

Options:

1. Deploy self-owned content delivery network services.
Maintainability (- -), Performance (+), Security (+)

2. Use 3rd party Content Delivery Network services.
Maintainability (-), Performance (+), Security (=)

3. Use the same web server as the non-static content.
Maintainability (+ +), Performance (-), Security (+ +)

Concern Card

Concern-ID:

8

Concern:

The Users need to be able to protect their data when their account credentials are stolen. How can the system protect their data?

Options:

1. Implement Account Recovery using SMS.
Usability (+), Security (-), Maintainability (-)

2. Use a PIN number that is sent through SMS to support 2 Factor Authentication.
Usability (-), Security (+ +), Maintainability (- -)

3. <?>
<?>,

Concern Card

Concern-ID:

9

Concern:

The system needs to be able to display advertisements to the Users to generate income. Where will the system host these advertisements?

Options:

1. Host the advertisements internally in the system.
Maintainability (-), Performance (+), <?>

2. Make use of a 3rd party advertisement platform.
Maintainability (+), Performance (-), <?>

3. <?>
<?>,

Concern Card

Concern-ID:

10

Concern:

The users need to have an interface to interact with the platform. What interfaces whould be provided to the user?

Options:

1. Provide web pages, tailored for PCs.
Usability (=), Maintainability (=), <?>

2. <?>
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3. <?>
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Concern Card

Concern-ID:

21

Concern:

The system needs to store and transmit sensitive information between remote components (e.g. between databases). In what form will this information be handled?

Options:

1. The system stores and transmits information without encryption.
Performance (+ +), Security (- -)

2. The system transmits and stores information with use of encryption.
Performance (- -), Security (+ +)

3. The system stores information without encryption, but uses encryption for transmission.
Performance (-), Security (+)

Event Card

Title:

Fire!

Description:

There has been a small fire in one of the Owner's office buildings. Luckily, the fire could be contained and the data center was not jeopardized. However, because of this incident a new policy is now in effect that prohibits the use of single local databases.

Consequences:

If you selected a 'single local database' as design option for any of the concerns, those decisions need to be revised. For future decisions, this option is no longer available.

Event Card

Title:

Malware in advertisements

Description:

It has been found that many commercial advertisement platforms are at risk of serving malicious content.

Consequences:

Use of 3rd party advertisement platforms impacts *Security* with (-).

Event Card

Title:

New CTO

Description:

The owner hires a new CTO, who is not amused by the amount of money that is spent on code maintenance. She decides that maintenance is now the top priority for all projects, including yours.

Consequences:

The Owner's QA-Priority for *Maintainability* is set to 3.

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Event Card

Title:

Change in data protection regulation

Description:

Data protection regulations are becoming more stringent, and companies that don't consider data security aspects are now liable, with huge potential consequences.

Consequences:

The Owner's QA-Priority for *Security* is set to 2.

It is no longer allowed to use 3rd party cloud storage providers to store sensitive data.

Event Card

Title:

User survey

Description:

A user survey shows that users are mostly concerned with the performance of the system, and that they are willing to trade in usability for better performance.

Consequences:

The User's QA-Priority for *Performance* is set to 3.

The Users QA-Priority for *Usability* is set to 0.

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