

WEB BASED DECISION MAKER

A Software Project Submitted

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Fall 2016-2017 January, 2017

Software Project 1 AIUB

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Approval

The Software Project "WEB BASED DECISION MAKER" has been submitted to the following respected members of the Board of Examiners of the Faculty of Science and Information Technology in partial fulfillment of the requirements for the degree of Bachelor of Science in Software Engineering on 12th January 2017 by the following students and has been accepted satisfactory.

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Acknowledgements

We would like to take the chance to express our gratitude to our honorable teacher & Supervisor Abhijit Bhowmik for his continuous guidance and support regarding this report. Besides this, we have found so many sincere and productive advices from many people that we would like pay homage to them. We convey our gratitude to our honorable Vice Chancellor, Dr. Carmen Z. Lamagna for encouragement.

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CHAPTER 1: STATEMENT OF WORK

1.1 Purpose/Objectives

Feasibility study will provide fundamental investigations into the potential benefits associated with this project. The main purpose of the feasibility study is to cover all issues associated with the project, and determine if the investment of time and other resources will lead to a desirable result.

One of the most important aspects of the study is to ensure that the total investment needed to successfully bring the project to completion is considered. Often, this will include addressing components such cash reserves, labor, construction, production facilities, outsourcing, and the cost of raw materials. Only when the feasibility study has addressed the total cost of completing the project can the study progress to the next level.

As a second major component, the feasibility study will also address costs and other factors that are indirectly associated with the project.

The utilization of a feasibility study has often assisted companies in understanding which projects to develop and which ones to abandon before investing resources in something that ultimately shows no promise of generating revenue. Taking the time to engage in a pilot or feasibility study does involve some usage of available resources, but these costs are much more readily absorbed than the larger amount that would be expended on a project that ultimately proved to be worthless.

1.2 Scope

The scope of our project "WEB BASED DECISION MAKER" is to provide portal system of cellular electronics and gadgets. It also provides a platform for news, reviews and information about specification and performance of cellular products and their present market conditions with price. It also enables the users to compare between products and to find the better one.

The website helps the customer make the best decision by providing them with the ability to compare related products and providing a clear result on which product is the best choice. It also provides platform for the moderators to post previews and news. It also provides platform for the daily users to share reviews post blogs and comment on reviews, this allows the growth of a tech community on the site.

1.3 Proposed System

Our proposed system is intended for implementing a website which allows for online decision making by the website on compared cellular products. This decision will be based on various specifications of the products like - display size, resolutions, processor, RAM, sensors and other features. Users can get news, previews and reviews from this website about upcoming and relevant products. This website can cater a growing community of gadget enthusiasts by enabling features like personal Blogs, paid or personal reviews and user comments to the registered user base.

1.4 Acronyms and Abbreviations

Provide a list of the acronyms and abbreviations used in this document and the meaning of each.

AIUB – American Int. University of Bangladesh

1.5 System Features

User

- View posts like News, Reviews, Previews and Blogs
- Search and browse products.
- View products specifications on the designated product pages.
- Compare 2 or more products and get a definitive decision.

Registered User

- Post Blogs, Reviews.
- Comment on posts and products.

Admin

- Post News and Previews
- Add and Update Product pool
- Verify User posts

1.6 Environment

1.6.1 Organizations Involved

Project Client: ABHIJIT BHOWMIK.

Developer: Web Based Decision Maker team

User: Tech Enthusiasts, gadget buyers.

1.6.2 Processing

- This Web Application will have a graphical user interface which will be able to view by any browser, thus this website is browser independent.
- Two working modules. Administrator and Client.
- This website will store the information of all registered user which can be viewed by user themselves and the administrator of this software.
- Authenticated & secure login system and secure data transmission for all users.

1.6.3 Security

System's security requirements:

- Registered User and Moderator's authentication is required to login to the website.
- Moderator can deny any registered user's activity if felt necessary.

1.7 Assumptions

Some third party software may be use to build up this project. These are free components, most of them are open source. We have used Opera, Mozilla Firefox, and Google Chrome etc. as a web browser to access user interface as client application. So our project will not be affected because we are not using anything for which it becomes illegal to use.

Some open source libraries and software's are used to build up this project:

- PHP Session to verify user login,
- For dynamic interface some Ajax library is used.
- MySql is used as a database server.

1.8 Constraints

- o <u>Usage outside regulation:</u> Unregistered users cannot make new posts on the website.
- Bandwidth limitations: It may lose server connection for technical error (Depends on Hardware/Internet connection). We need to run query again.
- o <u>Databases</u>: Databases we are using MySql Database. User queries more than server's limitations we need to check databases and refresh table data. In case of lack of DB caching.
- o <u>Parallel operations</u>: Parallel use of other Internet application with this software may hamper in bandwidth, may occur taking time for a query for slow connections.
- o <u>Language requirements:</u> Language is used in this software is PHP. Suppose any user wants Oracle Database we need to use bind variable technique.

It may cause (In case of internet security) –

- Impersonation: can fake (spoof) source address in packet (or any field in packet)
- **Hijacking:** "take over" ongoing connection by removing sender or server, inserting himself in place
- Denial of service: prevent service from being used by others (e.g., by overloading resources)
- **Server Overload:** Server can be overloaded if user base increases dramatically in a very short period of time, this will render the website inaccessible.

1.9 PROPOSED SYSTEM

1.9.1 Description/Improvements of Proposed System

- Implement Forum section.
- Increase server load capacity.
- Implement live Q&A.
- Implement FAQ.

1.9.2 Staff resource

- Two web developers.
- One web designer.
- One software quality tester.

1.9.3 Hardware:

- Client side: Computer with an internet connection.
- Server side: Server grade computer with internet connection.

1.9.4 Software

- Client side: Any operating system capable of running an up to date browser.
- Server side: The database will run on MySQL and the backend of the site will run on Apache Server.

Assumed implementation constraint can be:

- System Failure
- Power Failure
- •Implementation Constraint in SRS
- •The project may not meet the agreed quality parameters
- •The project might not deliver on the agreed time

1.9.5 Operating Environment

The system will be operated from the external (your preferred data center) Linux Server in which site will be hosted. Hosting server has 99% Uptime. This website is platform independent. User application is accessible through various kinds of browsers like Opera, Mozilla Firefox, and Google Chrome etc. This website is a web application where client application has user interfaces through browser and main part is hosted on Apache Server. Operating System can be used Windows of any version from Windows 98, Windows XP/Vista to Windows 7, MAC OS X 10.5 or above.

1.10 Project Time & Cost

1.10.1 Project Period

• Expected time of completion of project is 4 months.

1.10.2 Hosting Package

• Domain cost is Tk. 1000/Year

• For the most demanding sites

Web Space: 20 GB
Bandwidth: 50 mbps
Databases: Unlimited*
Mailboxes: Unlimited*

Tk. 5000/year

Estimated service cost

Description	Cost Assumption	
Site launch (hosting)	30,000 BDT	
Maintenance (1 year)	50,000 BDT	
Developers	100,000 BDT	
Grand total	180,000 BDT	

1.11 Risk assessment

Risk	Probability	Impact
Schedule Slip	35%	Marginal
System goes sour	10%	Critical
Project cancelled	15%	Negligible
False features rich	10%	Critical
Frustrated team members	20%	Marginal
Server down incidence	25%	Critical

The impact of each risk driver on the risk component is divided into one of four impact categories—negligible, marginal, critical, or catastrophic.

	Critical	Marginal	Negligible
Schedule slip		Project delay, exceed budget	
System goes sour	Grading miscalculation, Unauthorized access		
Project canceled			Payment cancelation
False features rich	System doesn't give proper output. Unable to fulfill requirement		
Frustrated team members		Fail to meet deadline	
Server down incidences	User overload, Hardware malfunction, electric grid malfunction		

1.12 Assessing overall project risk

- All the members are formally committed to support the project. They also ensure that they will give all types of available facilities.
- The software engineering team or the developers has the sound knowledge about the requirements so it is easily understandable by the team. The requirements details are well organized also informative, so it is under stable by the customers.
- The end-users are expecting that, they will be able to find all kind of information about cellular gadgets.
- The user has been fully involved in the definition of requirements. They are aware of the application requirements.
- Project scope is stable because the minimum and mandatory scope is almost covered by the software engineering team. If any further scope will arise then just adding it with the old ones.
- The software engineering team has the right mix of skills. The team members have the capability of doing their work in a team, ability to work in pressure and also have sound knowledge according to the software implementation.
- Currently all possible requirements are being listed, and seem that if anything would be added later to the list will not make the project unstable. All requirements for this project are easily available that will enthusiast the end-user to use it.
- Project team prepare the possible risk assessment and aware of handling the risk. Client is also being notified

CHAPTER 2: SOFTWARE REQUIREMENT SPECIFICATION

2.1 Objectives and Scope

The scope of our project "WEB BASED DECISION MAKER" is to provide portal system of cellular electronics and gadgets. It also provides a platform for news, reviews and information about specification and performance of cellular products and their present market conditions with price. It also enables the users to compare between products and to find the better one.

The website helps the customer make the best decision by providing them with the ability to compare related products and providing a clear result on which product is the best choice. It also provides platform for the moderators to post previews and news. It also provides platform for the daily users to share reviews post blogs and comment on reviews, this allows the growth of a tech community on the site.

2.2 Overview of the Present System

Currently there are very few Portal website for electronic gadgets in Bangladesh. Their users can view and compare products but the news, blogs, reviews combined together with it is scars on those websites. And the definitive decision delivering feature of our website is completely new in the market.

2.3 Data Flow Diagram of the Present System

Not required.

2.4 Weakness of the Present System

No available data older more than a year.

2.5 Overview of the Proposed System

This software project is intended for implementing a website which allows for online decision making by the website which helps the user choose the best product among the compared ones. This decision will be based on various specifications of the products like - display size, resolutions, processor, RAM, sensors and other features. Users can get news, previews and reviews from this website about upcoming and relevant products. This website can cater a growing community of gadget enthusiasts by enabling features like personal Blogs, paid or personal reviews and user comments to the registered user base.

2.6 Benefits of Proposed System

- User can browse and search for gadgets.
- Users can compare and get decision about which product to go for.
- Users can read reviews, blogs and news.

2.7 System features

2.7.1 View and submit posts

This feature allows users to view News, Blogs, Reviews, Previews and comments about the products featured on the website. This feature also allows registered users to make Blog posts, write reviews on products and comment under posts on the website. This feature also allows Moderators to post moderator privileged posts like News and Previews.

This is a medium priority feature.

Functional requirements:-

- 2.7.1.1 Registered user can write reviews related to products to share their experience and give ratings.
- 2.7.1.2 Registered user can comment on products, reviews and other posts so that they can share their opinion and create a discussion about the product.
- 2.7.1.3 Registered user can write blogs and published them (with moderator approval) on the Blogs page of the website.
- 2.7.1.4 A moderator can post previews about unreleased products on the previews page so that users can get an idea about the upcoming product.
- 2.7.1.5 A moderator can post News on the website's main page and the News tab simultaneously about current and upcoming products on the website and about other related trending topics.
- 2.7.1.6 Any user on the website can view any published post on the website, these posts include News, Blogs, Reviews, Comments and Previews.

2.7.2 Search for products and posts

This feature allows users to Search for products, News and Reviews on the website.

This is a high priority feature.

Functional requirements:-

- 2.7.2.1 Any user can use the search bar to get details about any products currently featured on the website
- 2.7.2.2 Any user can use the search bar to get details about any News published to date on the website.
- 2.7.2.3 Any user can use the search bar to get details about any Reviews currently featured on the website.
- 2.7.2.4 Any user can use the advanced search option to search for specific products with specific features.
- 2.7.2.5 Any user can categorize products while searching various factors so that they can prioritize their selection for a better searching experience.

2.7.3 View and compare products

This feature allows the user to view individual product pages select desired products compare these products and get a definitive decision from the website as to which product is better choice.

This is a high priority feature.

Functional requirements:-

- 2.7.3.1 Any user can view the product details. For each product listed there shall be a page designated to the detailed specifications, features and price of the product.
- 2.7.3.1 Any user can add any number of products to the compare panel so that they can find difference between them with a glance, side by side.
- 2.7.3.2 Any user can get definitive decision about compared products based on popularity, design, price, camera and performance.
- 2.7.3.3 Any user can learn about the Current deals of the products on each product page by visiting the current deals links.
- 2.7.3.4 Any user can subscribe to brands or specific products to get updates about said products via emails.

2.7.4 Update posts and products

The moderators shall be able to update the News and Product pages on the website. They shall also be able to verify users' post. The moderatos shall also be able to post previews on the website.

This is a high priority feature.

Functional requirements:-

- 2.7.4.1 A moderator can to verify user posts like the blogs and reviews before publishing them.
- 2.7.4.2 A moderator can update the News on the website.
- 2.7.4.3 A moderator can update the product page for each individual product as necessary

2.8 Hardware and Software Requirements

2.8.1 Hardware:

- Client side: Computer with an internet connection.
- Server side: Server grade computer with internet connection.

2.8.2 Software:

- Client side: Any operating system capable of running an up to date browser.
- Server side: The database will run on MySQL and the backend of the site will run on Apache Server.

2.9Human Resource Requirements

The total human resource needed for implementing and operating the system is mentioned below.

- Web developers will design, develop and test the website.
- Article writers will write articles, news and preview for the website.
- Market researchers will research for latest and upcoming relevant products.

2.10 Constraints and Limitations

- <u>Usage outside regulation:</u> Unregistered users cannot make new posts on the website.
- o <u>Bandwidth limitations</u>: It may lose server connection for technical error (Depends on Hardware/Internet connection). We need to run query again.
- o <u>Databases</u>: Databases we are using MySql Database. User queries more than server's limitations we need to check databases and refresh table data. In case of lack of DB caching.
- o <u>Parallel operations</u>: Parallel use of other Internet application with this software may hamper in bandwidth, may occur taking time for a query for slow connections.
- o <u>Language requirements:</u> Language is used in this software is PHP. Suppose any user wants Oracle Database we need to use bind variable technique.

It may cause (In case of internet security) –

- Impersonation: can fake (spoof) source address in packet (or any field in packet)
- **Hijacking:** "take over" ongoing connection by removing sender or server, inserting himself in place
- Denial of service: prevent service from being used by others (e.g., by overloading resources)
- **Server Overload:** Server can be overloaded if user base increases dramatically in a very short period of time, this will render the website inaccessible.

2.11 Budget

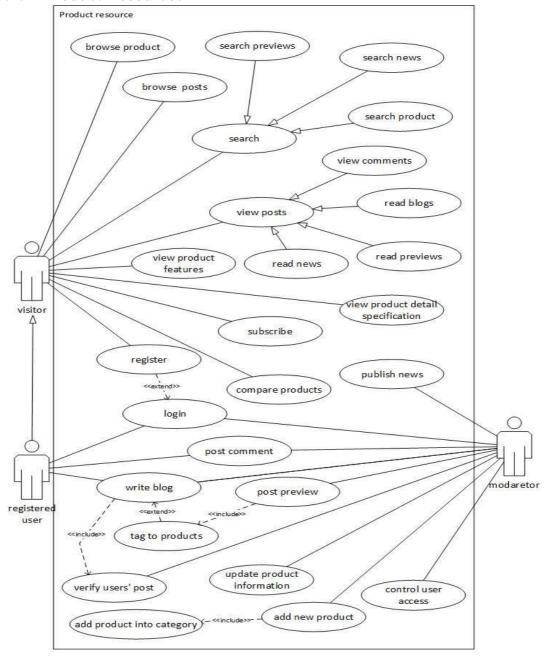
Description	Cost Assumption
Site launch (hosting)	30,000 BDT
Maintenance (1 year)	50,000 BDT
Developers	100,000 BDT
Grand total	180,000 BDT

2.12 Conclusion

This Software Requirement Specification Document has been developed based upon by the studying similar websites by the project manager. But since some features are new thus some unusual circumstances are expected but can be handled. This may derail the values and time frame mention in this document to an extent.

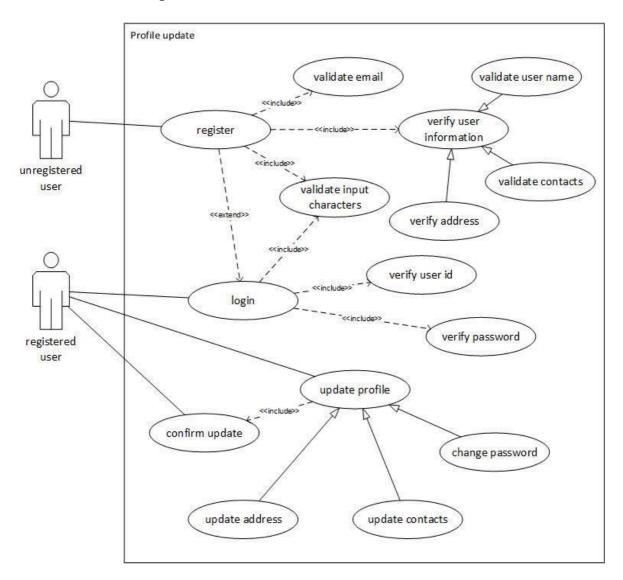
3.1 Use Case Diagram

3.1.1 Product Resources



- Visitors can browse search and view products and posts.
- Registered user can give comment write blog and review.
- Moderator can add product and post news and reviews.
- Moderator can update information.
- Registered user have to login to post.

3.1.2 Profile Update

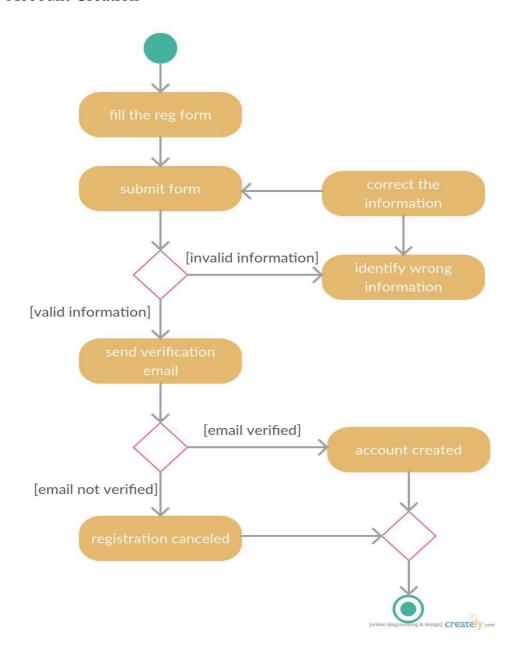


The functionality of update profile is as follows:

- Unregistered user can register to the system
- Registered user can login to the system
- Registered user can update their profile
- Registered user have to confirm their profile update

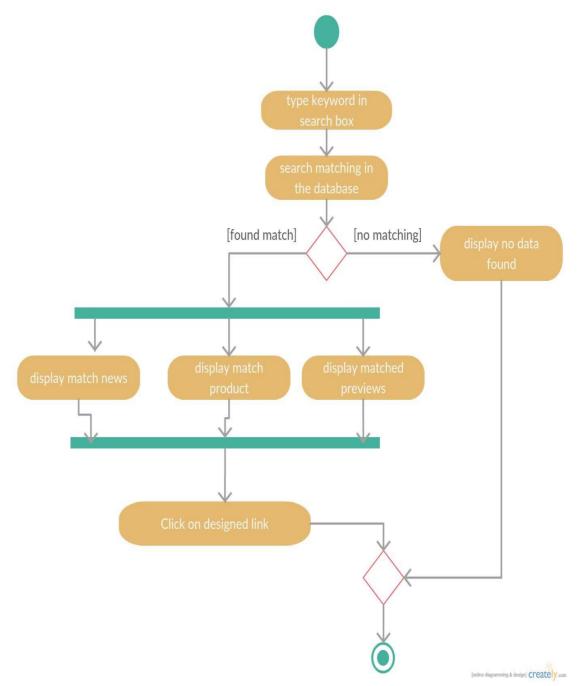
3.2 Activity Diagram

3.2.1 Account Creation



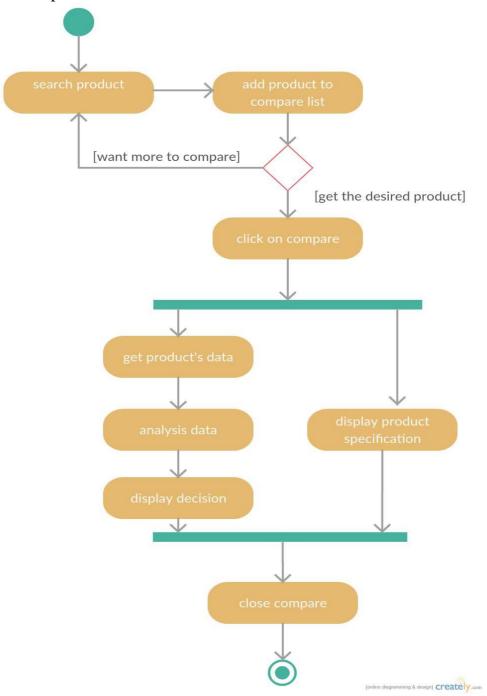
- To create account user need to fill up the signup form.
- Then they need to submit the form.
- After validation user will get a verification email.
- After verifying email the account will be created.

3.2.2 Search



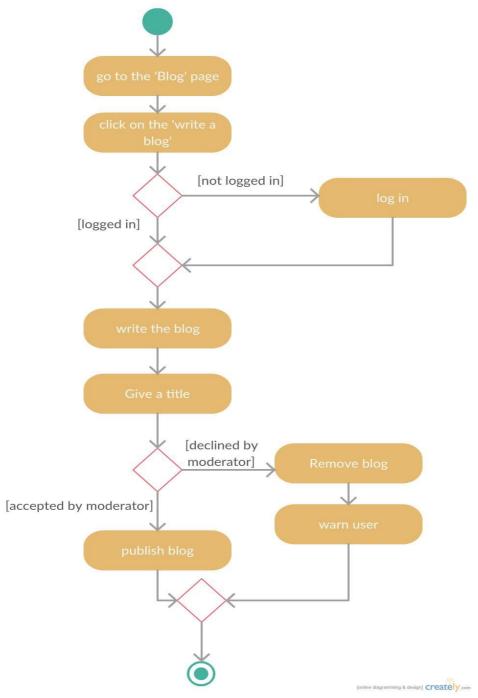
- To search user need to enter a keyword in the search bar.
- The database will be searching for the matching keyword.
- If the keyword is matched the search result will appear.
- From the search user can select their expected product.

3.2.3 Compare and Decision



- User need to select two products for comparison.
- The information on the products will be analyzed and display the decision.
- Also the specifications will be displayed.

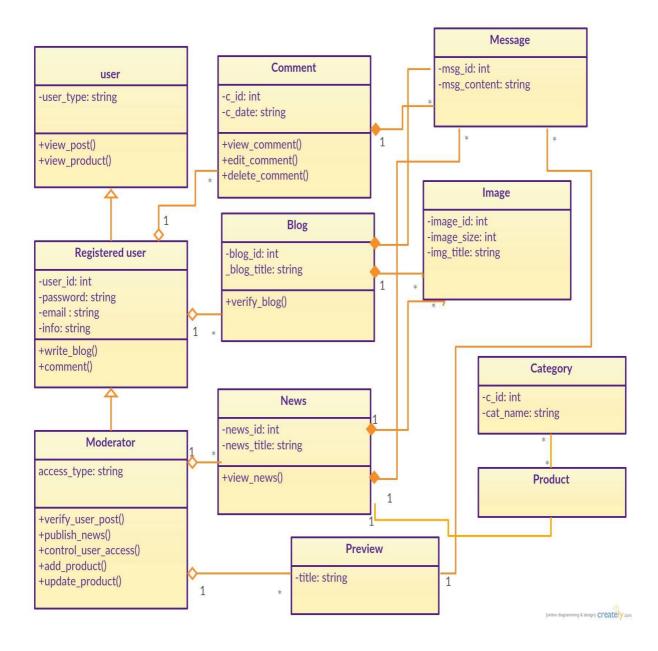
3.2.4 Publish Blog Post



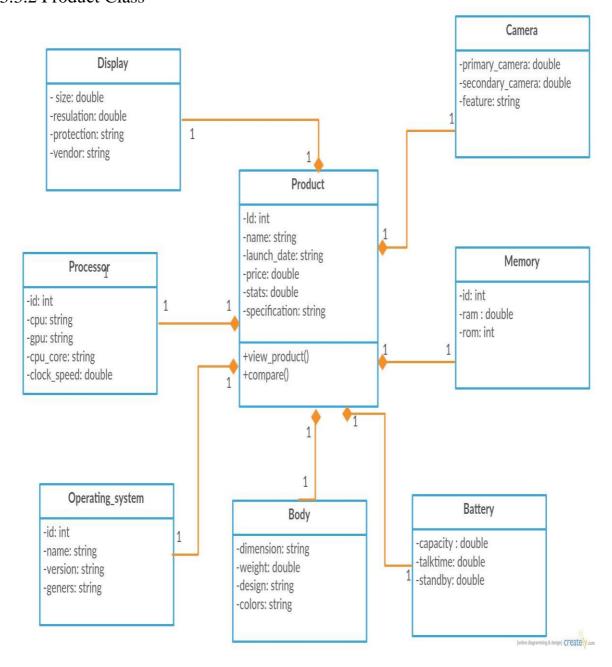
- User need to login to post something.
- Give a title and add tags for the post.
- Right the article body and submit.

3.3 Class Diagram

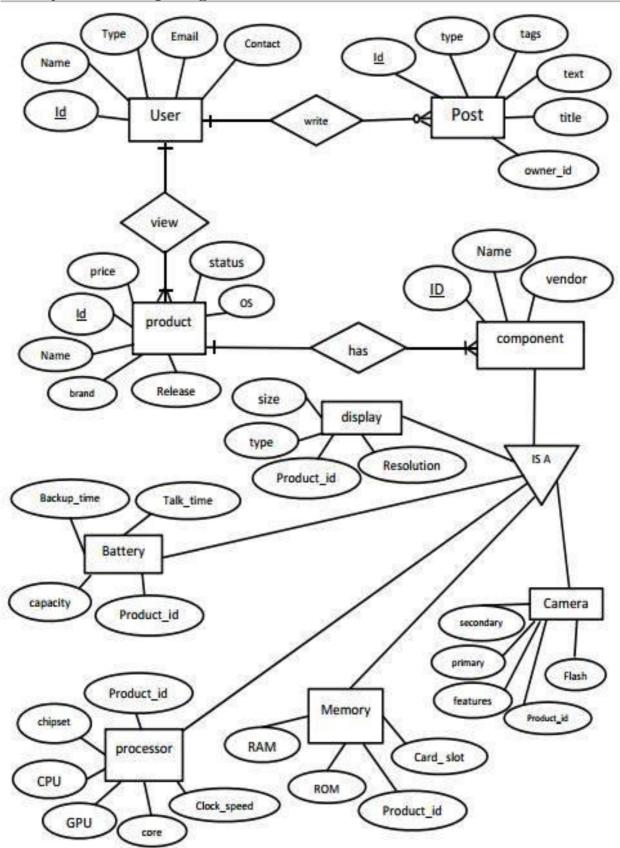
3.3.1 Top Level classes



3.3.2 Product Class



3.4 Entity Relationship Diagram



CHAPTER-4: SOFTWARE PROJECT MANAGEMENT PLAN

4.1 Document History and Distribution

This document has been built based on requirements gathered for the software project "WEB BASED DECISION MAKER". All the developers will be handed this document to base their development scope upon.

4.1.1 Revision History

Revision #	Revision Date	Description of Change	Author
01		Primary Phage	
02		Yes	

These versions will show up there and also on its service work good.

4.1.2 Distribution

Recipient Name	Recipient Organization	Distribution Method
Abhijit Bhowmik	AIUB	Hard Copy, Soft Copy

4.2 Overview

4.2.1 Purpose and Objectives

The main objective of this document is to illustrate the requirements of the software project **WEB BASED DECISION MAKER**. The document gives the detailed description of the both functional and non-functional requirements for this system. The document is developed after a number of studying the requirement specifications paper of the given Project. The final product of the team will be meeting the requirements of this document.

4.2.2 Project Scope

- Provide decision to the user about the best choice between their compared products.
- Provide latest information about tech products.
- Provide Platform to the user for posting reviews, and blogs about chosen products.

4.2.3 Assumptions and Constraints

The assumptions during the projects are-

① The development team has not quite enough experience as a whole to complete the project.

The constraints during the projects are-

① Additional resources (people or money) are not available for the project.

4.3 Project Deliverables

4.3.1 The list of project deliverables is:

- 1. Statement of Work (SOW)
- 2. Software Requirements Specification (SRS)
- 3. Software Project Management plan (SPMP)
- 4. Software Design Plan (SDP)

4.3.2 Schedule and Budget Summary

SCHEDULE		
MILESTONE OR MAJOR PROJECT DELIVERABLE	PLANNED COMPLETION DATE(DAY)	
SOW	16 th November 2016	
SRS	20 th November 2016	
SPMP	14 th December 2016	
SDP	15 th December 2016	
Soft testing plan	19 th December 2016	
Presentation & project progress	22 th December 2016	
Technical documentation	With completed product	
Software evaluation report	Along with final submission	

4.4 Evolution of the Software Project Management Plan

The preliminary drafts of the SPMP will be submitted to the project manager and after approval; copies of the same will be distributed to the members of the group on the date as referred to in section 1.1.4.

4.4.1 Definitions

Terms		Description
	SOW	Statement of Work
	SRS	Software Requirement Specification
	SPMP	Software Project Management Plan
	SDP	Software Design Plan
	SQATP	Software Quality Assurance and Testing
		Plan
I	mpact	1-catastrophic
		2-critical
		3-marginal
		4-negligible

4.5 Project Organization

Project organization depends on three major Structures

4.5.1 External Interfaces

The cellular gadget portal's customer representative will be responsible for formal interaction between the developer's team and the customer contact. Necessary interaction will be done through anyone on the team, but all discussions with the customer will be documented clearly for record. All customer requests for services or configuration item changes will be in writing and approved by the project's Configuration Control Board (CCB), which consists of all team members.

4.5.2 Internal Structure

There are four developers for this project. All members have specified areas of responsibility and everybody contributes equally to the project.

The team members will change roles throughout the life of the project, and each member will continue to have more than one role.

4.5.3 Roles and Responsibilities

The software developers are responsible for all documentation to be developed and also for all work to be done.

4.6 Managerial Process Plans

4.6.1 Project Start-up Plan

Because most of this information was pre-defined for the team, this section will not describe the rationale for many of these choices.

4.6.2 Estimation Plan

As previously stated, the total development time is estimated to be 4 months and the total internal cost to be BDT 180,000. These figures were obtained by expert judgment by analogy, that is, by comparison with similar projects.

4.6.3 Staffing Plan

Each team member will be available for 8 hours per day and 5 days a week, as the project purpose requires. This time includes the team and supervisor meetings, document preparation and inspection, and tool development.

4.6.4 Resource Acquisition Plan

- All resources for the project will be available at the start of the project and will not change substantially over time.
- The team member's roles will change according to project needs

4.6.5 Project Staff Training Plan

No additional staff training is needed for this project.

4.7 Work Plan

Work Activities and Schedule Allocation

4.7.1 Budget Allocation

Budget Allocation		
	Hours	Costs
Agency Labor		
Contract Labor	N/A	0 BDT
Non-Labor Costs	N/A	0 BDT
TOTAL HOURS / IMPLEMENTATION COST		

4.8 Control Plan

4.8.1 Requirements Control Plan

When changes are to be made in the requirements after the Software Requirement Specification has been released, the changes shall be brought to the attention of the developers and discussed. Any changes that are to be made will be with the prior approval of the supervisor and only if feasible and permissible within the constraints of the project and resources in terms of knowledge and skill of the developers required. Once the changes have been made to the Software Requirement Specification document, an updated version of the Software Requirement Specification will be released.

4.8.2 Schedule Control Plan

If the work scheduled in section 1.1.4 gets behind, the developer will be ready to spend extra time on the project in between and after the schedules to make up for the lost time and deliver the final project on time.

4.8.3 Budget Control Plan

Average monthly income will be determined by totaling all earnings for the year and dividing by 12. Average monthly spending will be generated by tracking all expenditures. "The difference between "Budget" and "Current Spending" will be the savings. If expenditure exceeds the income than steps may be follow to cut back on expenditures, depending on the specific savings goals. Expenses are monitored by the project manager, and reported and accessed via the Weekly Status Report.

4.8.4 Quality Control Plan

Any major changes that affect the milestones or the budget will have to be approved by all and documented. All will be responsible for ensuring that the project will be completed on time and within budget. This will be accomplished through daily meetings of the team members with the supervisor. At each meeting, developer team will present the day's progress and problems. Everyone together will determine whether they are progressing as expected and whether they are following the specification document and the project management plan. Any major problems faced by the team members will immediately be reported to all.

4.8.5 Reporting Plan

The updated Software Project Management Plan will be circulated as mentioned in schedule of section 1.1.4. Each of preliminary versions of all the documents and updates and status reports will be sent and discussed with the advisor and upon approval the approved document will be circulated to the other members of the team. The report on the status of the project will be sent to the members of the team.

4.8.6 Metrics Collection Plan

As the system based on object oriented so the metrics focus on measurement that can be applied to the class and the design characteristics—localization, encapsulation, information hiding, inheritance, and object abstraction techniques—that make the class unique.

4.9 Risk Management Plan

Risks	Probability	Impact	Rating	RMMM
Project Manager Availability	50%	3	Medium	R-1
Schedule slips	70%	1	High	R-2
System goes hour	60%	3	Medium	R-3
Project canceled	30%	4	Low	R-4
False feature rich	40%	2	Low	R-5
Frustrated programmers	80%	2	High	R-6
Staff Availability	60%	2	Medium	R-7
Customer Participation in Beta Testing	30%	3	Low	R-8

4.10 Closeout Plan

At the end of the project, the following actions will occur:

- The developers team will make a hard copy file of all documents, source code, plans, etc. generated by the team.
- The development ream will store the copy of all material in electronic format on a cloud storage.

4.11 Technical process plans

The Software Project Management Plan will specify the development process model, technical models, tools and techniques that will be used to develop the work products, project infrastructure and product acceptance plan.

4.12 Process Model

The XP (extreme Programming) agile process model will be follow during the project implementation.

4.13 Methods, Tools and Techniques

The software project, WEB BASED DECISION MAKER, adapts the system on Personal Computer using HTML, PHP, Visual Studio 2012 and MySQL for database management system. Additional tools that will be used are: Notepad++. Google Chrome, Mozilla FireFox, etc.

4.14 Infrastructure Plan

The hardware resources are four Intel or AMD Personal Computers running Windows 7 or UBUNTU operating system. The project using software resources are like Notepad ++, XAMPP, Wamp etc.

4.15 Product Acceptance Plan

Every milestone of the project will be accepted formally by the project manager by signing appropriate acceptance documentation. At the end of every phase the project manager will perform an acceptance test. This may result in additional requests for change and improvements. The project manager will test the final product/application for acceptance.

4.16 Supporting Process Plans

The Software Project Management Plan will include the plans for the supporting processes that are part of the software project. These plans include: configuration management plan, verification and validation, software documentation, quality assurance, reviews and audits, problem resolution and subcontractor management.

4.17 Configuration Management Plan

All the project deliverables are to be considered as configuration items. The configuration item as well as its file would be named after the document like SOW, SRS and followed by the version number. For example, all the preliminary versions that are submitted to the project manager for review would be named with the abbreviation followed by 0.1, 0.2. After the project manager approves the basic SPMP, this baseline document will be version 1.0 and is distributed to the project members. Informal updates with the project manager will be numbered with 1.1, 1.2, etc. and the next full distribution to the committee would be version 2.0, etc.

4.18 Verification and Validation Plan

The Software Project Management Plan for this project shall contain the verification and validation plan for the software project and it shall include tools, techniques and responsibilities for the verification and validation work activities. The verification and validation plan will be part of a separate document and will be maintained accordingly.

4.19 Documentation Plan

The IEEE standards would be followed for all documentation purposes. All the documents would be discussed and reviewed with project manager before their baseline versions are issued and distributed to the members of the committee on the due dates.

4.20 Quality Assurance Plan

The quality of our project will be maintained and checked by the project manager. He will assure that this project is maintaining the quality.

4.21 Reviews and Audits Plan

Review and Audits would be addressed as a part of the Software Quality Assurance and Verification & Validation Plan that would be developed following recommended departmental standards.

4.22 Problem Resolution Plan

All problems would be resolved informally the developer and the project manager. That is, there is no specific plan. But, The Software Project Management Plan will be updated accordingly should the need for such a plan arises.

4.23 Subcontractor Management Plans

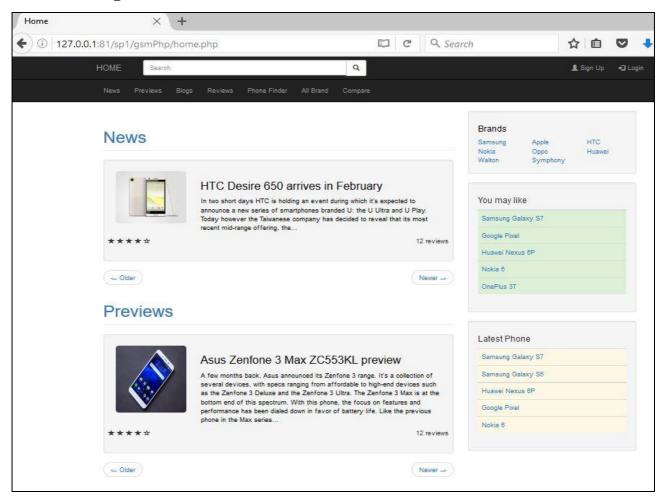
The project does not have any plan for managing subcontractors that may contribute work products to the software project.

4.24 Process Improvement Plan

After the development, the project will be regularly checked by the project manager and he will suggest the developers if any kind of improvement is needed.

Chapter-5: User Interfaces

5.1 Home Page



5.2 Sign up and Login

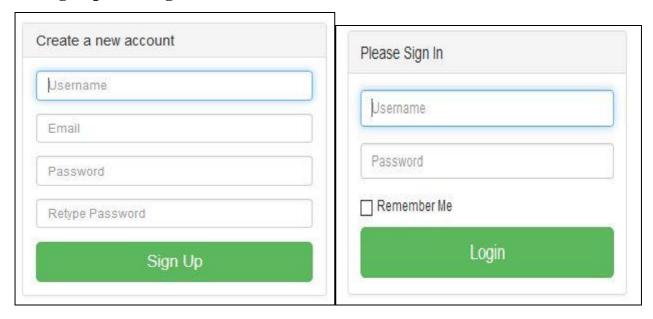
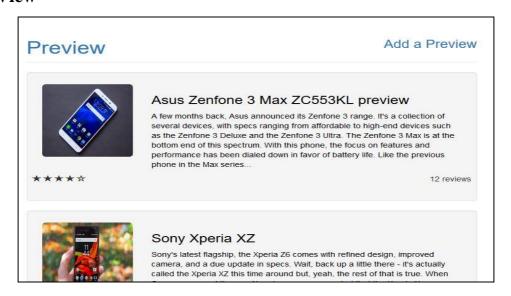


Fig-5.2.1 Sign up

Fig-5.2.2 Login

5.3 Posts View

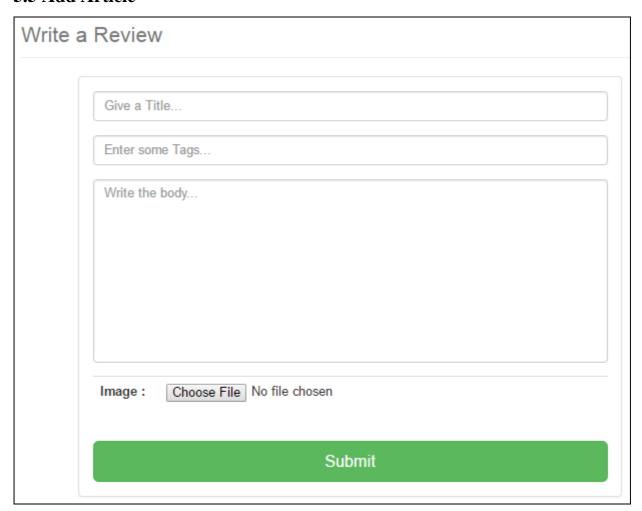


5.4 Article View

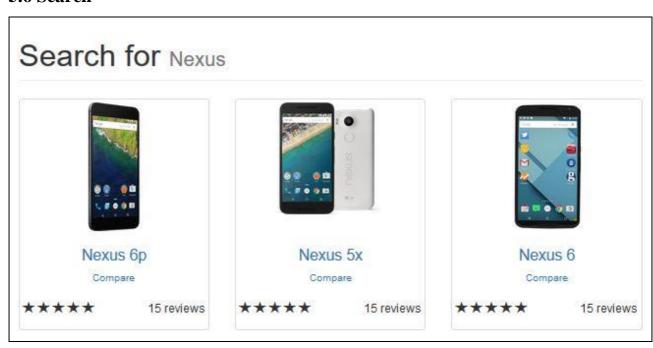


A few months back, Asus announced its Zenfone 3 range. It's a collection of several devices, with specs ranging from affordable to high-end devices such as the Zenfone 3 Deluxe and the Zenfone 3 Ultra. The Zenfone 3 Max is at the bottom end of this spectrum. With this phone, the focus on features and performance has been dialed down in favor of battery life. Like the previous phone in the Max series, the Zenfone 3 Max features a massive battery pack designed to get through an entire day of intensive use or even two.

5.5 Add Article



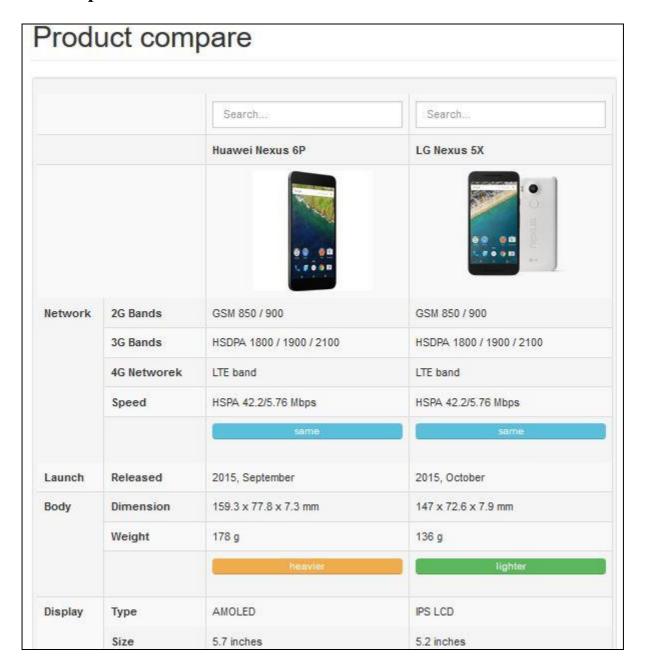
5.6 Search



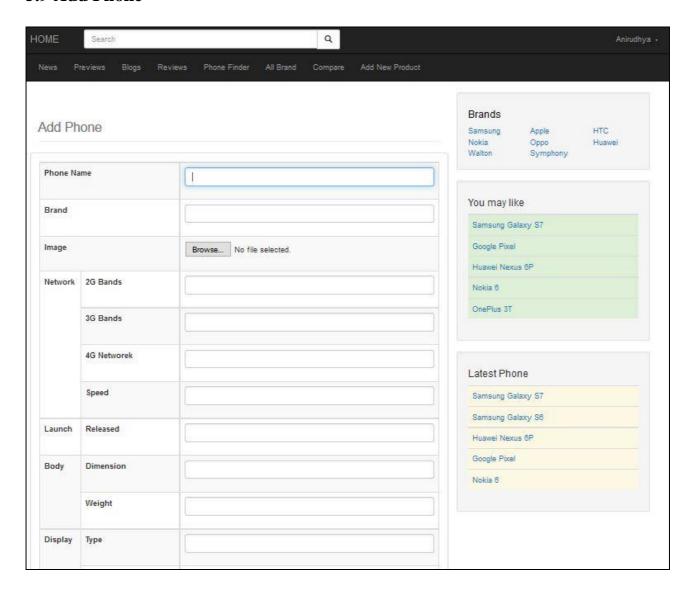
5.7 Phone View



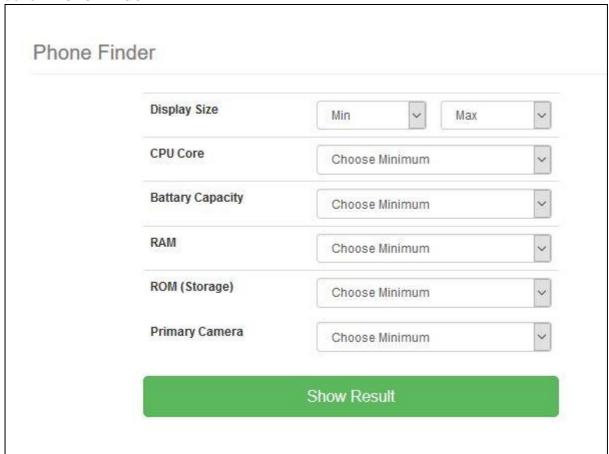
5.8 Compare



5.9 Add Phone



5.10 Phone Finder



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