

Project Proposal

Title: Easy-Bank (A Fin-Tech Website)

Submitted to: DR. Mohammad Monirujjaman Khan

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Submitted by:

NAME	ID
1. Hasanul Banna	1612536642
2. Shakil Ahmed	1721087042
3. Mohammad Arshadul Alam Rakib	1731487042

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Introduction

Financial Technology ("FinTech") is defined as "a new technology-enabled technology that can lead to new business models, applications, processes or products that have a direct impact on financial markets and institutions and in the provision of financial services". [1]

It has become a fast-growing business space, affecting not only the banking industry but especially in terms of typical business models, risks and operations. The ability to increase efficiency, reduce costs, improve access and delivery of financial services makes the FinTech business more attractive. Such financial services are highly technical and include but are not limited to the following: "Peer lending (" P2P "), online payments, foreign exchange services, digital wallets, emoney, automated or investment advice, big data, etc. to make a service fast, easy and cheap customer finance.

Financial services, including banking services, are on the verge of a transition that is being transformed by technology and digital technologies. A rapidly growing number of financial businesses and technology firms are experimenting with complementary technology and financial solutions and new products in the financial services sector that is changing the way financial interventions occur or lead to inefficiencies. [2]

FinTech is broadly the term omnibus used to describe the emerging technological innovations in the financial services sector, with increasing reliance on information technology ^[2]. Starting as a term referring to the ultimate technology used by major financial institutions, it has grown to include new technologies in the financial sector, including innovations in financial and educational studies, commercial banks, plants, etc. ^[2]

The new technology is considered one of the most influential developments affecting the global financial sector recently. New innovation related to payment, lending, asset management and insurance poses a challenge to business models and financial institution strategies; however, this also brings opportunities for both market participants and newcomers. At the same time, innovation can create new risks for individual financial institutions, consumers of financial services, and the financial system as a whole.

Background

The "Easy-Bank" website is an online banking platform. It is an information-based website. This website presents all the information of all the banks for the customers like, insurance, home loan, saving accounts, study loans, car loans, family loans, mutual funds etc. So, people can compare easily and find the best financial option for them. Nowadays we are very familiar with the mobile banking concept, we want to explore everything through mobile by sitting at home. In our country to move from one place to another is so time-consuming. With this website, people can collect all the necessary information which is hassle-free and also less time-consuming. When people share their needs with us through the website, our customer service unit highlights the information in front of them. Customers no need to find or analyses each and every bank-details.

It is a highly secure, user favorable, and easy operating platform. It is the easiest path for people to find and assemble their necessary information. Just by some click on the website and just to put some information about their choice, that's it!! All the information will appear on the screen.

Fin-Teach contains thousands of information for all 61 banks including government and private banks in Bangladesh.

Functions:

- General Services of all user categories
 - Create Account
 - Access to the Current Account
 - Delete Account
 - Forget Password
- General Users Uses
 - Subscribe from Messages and Mails
 - Check Credit Score
 - Compare Best Bank Offers
 - Purchase Credit Card
 - Check best bank offers for loan in your city
 - Unsubscribe from messages and mails

- Banks or Credit Cards
 - Verify customer credit score
 - Credit card Approval
 - Loan Approval

User Classes and Characteristics:

• ADMIN:

The administrator has access to all of the users' content and is able to delete malware accounts.

• GENERAL USERS:

Ordinary users or customers of the website can only access their personal information.

• BANKS or CREDIT CARD:

Banks can access the details of users who have applied for a loan or credit card.

Problem Statement:

• Example problem No 1:

MR. X is a retired banker. He has recently decided that he will make a house for his family because he had been living in a rented house for a long time. So, MR X calculates that he needs approximately 3 Lakhs taka to complete the project. However, this tremendous amount of money he does not have, so he thinks he needs a loan. However, though it is COVID-19 (A Worldwide Pandemic), he does not want to go outside because the second wave of this pandemic is running. So, what is the possible solution for this problem? On the other hand, MR X would not want to delay the project.

Here we are helping out MR X. Our Smart Fintech web application can give him a solution. Through the internet, it is possible to access every corner of the world. So, MR X can find the best possible result for this problem by clicking one click on our website. Our website would suggest to him the best possible solution regarding his project.

• Example problem No 2:

Mr. Y stays in Dhaka for a long time. He is a corporate job holder. Every day he goes to his office standing on the local bus. Moreover, sometimes it so happens that he can get the bus and for this, he cannot go to the office in time. So, it makes it a little bit problematic for him. Furthermore, the

distance between his office to home is almost 20 KM. So, it is complicated to continue the job without a car, and though it is Pandemic time and overall, the safety issue rises in the public transportation system, so MR Y has decided to buy a car by a bank loan.

Here we are to help MR Y. Our Web Application can give him the best plan for his Bank loan that he can buy a car.

• Example problem No 3:

Mr. Z is a university student, and he wants to start a business along with his friends. He does not have the money he needs and does not want to give up his dreams. He tries to manage the money from some of her relatives, but at last, he would not manage at all. Moreover, though It is a COVID time, he would not go outside frequently for safety issues. So, he needs some startup loans to fulfill his dream business and look for the low-interest type bank around his area at home.

Here we are to help MR X. All he needs to do just go to our website and search for this category. Done, our website will guide him what he should do now.

Problem analysis & solutions:

When we think of taking loans there always comes negative thoughts in our mind. Like how would we take the loan, which bank is going to offer which loans and how much interest will I have to pay everything. This creates a lot of problems when we also think about there are a lot of banks out there and each one has a different interest rate and different process of giving loans. So, it comes really difficult when one likes to take a loan from a bank. To find this solution and make life easy we want to make a smart fintech web application which is going to help others give a solution regarding these problems. Our website will provide one to calculate and give one with all information and help them out their problems.

If anyone wants a loan, wants to make the startup or seeking any kind of fund though us they are always welcome to us. We will provide him the best solution for this problem so that he can proceed further and don't get stuck in the financial problem and fulfill his dream. We want to make a hassle-free banking solution for everyone which will make the users more comfortable with the banking system.

Features:

Account Registrations: Here at first when one enters our site he or she has to register their name with all other information required. Then they will find different types of options regarding their needs which will help them and fulfill their desires.

Apply for credit card: Credit cards let you make high-ticket purchases on easy EMIs and make shopping more rewarding for you. Our site is the right place to find a credit card that best fits your needs and helps you make the most of your purchases. There will also be different options from which one can choose their best options.

Compare and Apply for Personal Loans: Personal loan is a short to medium term unsecured loan granted to an individual. It is commonly used to meet such financial needs as debt consolidation, wedding expenses, unexpected medical costs, startup loan for youth, home renovation and others. Flexibility of usage, minimal documentation and quick processing make personal loan a preferred financing option. Unlike other loans, it usually has a shorter repayment tenure ranging from 1-5 years. Depending upon the individual applicant's profile and lender, the APR (Annual Percentage Rate) of a personal loan may vary from 11.29% to 35%.

Business and Startup loan: Business loan is the primary unsecured type of funding, designed to meet the day-to-day business requirements of individuals, entrepreneurs, micro small, medium and large enterprises. Borrowers are not pressurized to submit any collateral or security to avail unsecured business loan. ^[3]

Home loan: A home loan is an amount of money that an individual borrows from a bank or money lending company at a certain rate of interest to be paid with the EMI every month. The property is taken as a security by the money lending company for the Home Loan. The property can either be commercial or personal in nature.

Loan against property: The Loan Against Property allows you to borrow up to 75% of the value of your property. The property you take a loan against is offered as collateral/mortgage and the

bank forwards the loan at an attractive rate of interest for a loan tenure of up to 20 years, in case of salaried individuals and up to 15 years in case of self-employed individuals. [4]

Education Loan: It is to pursue higher studies for undergraduate courses (general/technical) in home and post-graduate courses in home and abroad. Maximum Tk.5.00 lac for studies in Bangladesh & Max. Tk.20.00 lac for studies abroad. [5]

Car loan: Get and drive your dream car through our wonderful car loan facilities. We offer you to materialize your dream of owning a car. Whether you want to purchase a brand-new car or a reconditioned one, we care about your requirements! We also offer CAR LOAN with most privileges that you look for. ^[6]

Objective of the project:

We believe in using technology as an enabler to provide a world-class consumer experience. One of our aims is to provide each consumer coming to our platform a customized experience, with tailor-made product offerings, according to his need, track-record, lifestyle, and life-stage. We also believe in providing and completing all expectations of what any customer asked for when entering our site.

Expected result of the project:

We Do expect a lot from this project. Like if you think about it from a user perspective I always think about a site that could lead us to all possible solutions which we all face daily on banks. As a result, both mental and physical health hampers. But with this site, we can do it all with just a click on the site.

And if we think about it from a monitoring team perspective, we all will be honored and delighted to do these which create a smile on others and make life easier. Even if we have faced a lot of these problems from banks, we can assure you that this won't happen again if anyone uses our site.

Existing similar system:

BankBazaar.com is the No. 1 neutral marketplace in India for financial products ^[7]. With multiple offers from multiple banks, one can compare offers and check your eligibility in minutes. BankBazaar's revenue comes from applications-based commissions from banks^[7]. There is no commission or charge to customers. This site policies and our policies match in many aspects like the commissions from banks and others and like other aspects. We also take motivation from Paisabazar.com, bankbazaar.com. This is also a similar site like this.

Types of Similar Fintech Companies:

We Spotted some leading companies which are related to our work. We found that these types of companies are common in their country. However, all the world will develop every sector digitally; So, the IT sector developing this sector more precisely for the ordinary people.

Ranking	Company Name	Business Category	City
1	Paytm	Mobile wallet, e-commerce platform and payment bank	Nodia
2	MobiKwik	Mobile Wallet, recharge, bill	Gurgaon
3	BankBazar	Providing customized rate quotes on loans and insurance products	Chennai
4	PolicyBazar	Leading Online insurance aggregator in India.	
5	PaisaBazar	Leading Online insurance aggregator in India Gurgaon	

6	FINO PayTech	Financial inclusion technology provider	Mumbai
7	ItzCash	Multipurpose prepaid cash card	Mumbai
8	Capital Float	Online leading platform for small business	Bangalore
9	Ezetap	Payment device maker	Bangalore
10	Citrus Pay	Payment gateway and mobile wallet	Mumbai
11	FinTech BD	Fin-Tech BD is a software provider dedicated to the Financial Services Industry. Fin-Tech BD empowers the financial service companies with software, services, consulting and outsourcing solutions focused on investment analytics, investment management and corporate financing. [8]	Bangladesh

Software Tools:

- 1. Xampp Software
- 2. VS Code
- 3. Anaconda navigator (Alternative of VS Code)
- 4. MySQL
- 5. Adobe Photoshop
- 6. Adobe Illustrator
- 7. Adobe XD

- 8. Documentation Tool
- 9. Framework and Language
- Xampp Software: XAMPP is a free, open-source, cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP and Perl programming languages. Though we are working on the PHP language/ Python, we need it for our project's back-end part.
- VS Code: Visual Studio Code is a freeware source-code editor made by Microsoft for Windows, Linux, and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git. We will use this throughout our entire project. We find VS Code user-friendly for our project. We install many plugins in the interface, which will help us make the project more effective. We can code here and see the other groupmates' code because we install git and git bash in our platform, directly connected to our GitHub repository. So, we find it suitable for our project.
- Anaconda: We use anaconda as an alternative platform of code. Sometimes, our coding
 interface would not respond to decide to use it as our second option. We find it useful, and
 it contains almost every option like vs. code. If anything does not flow with us and find
 any problem vs. code, we are ready to use anaconda as our second option.
- My SQL: MySQL is an open-source relational database management system. We use My SQL for our database system. We find it user-friendly and like all of our group members are familiar with it, it will help work with MySQL.
- Adobe XD: Adobe XD is a vector-based user experience design tool for web apps and mobile apps, developed and published by Adobe Inc. Now it is available for macOS and Windows, although there are versions for iOS and Android to help preview the result of work directly on mobile devices also. We are going to do our UI/UX design with Adobe XD. It is built up only for the UI/UX designer to make their work more accessible and comfortable.
- Adobe Photoshop: Adobe Photoshop is a raster graphics editor developed and published by Adobe Inc. Photoshop will be used only for Photo Editing and photo-related issues. In

- our project, we are going to use so many photos. Sometimes we need to do photo retouching and resize. To do that, we used photoshop here.
- Adobe Illustrator: We used Adobe illustrator to make our UI/UX more attractive and
 responsive. Also, there will be some vector work like Logo design in our project. Because
 we know without a logo, a project does not fulfill properly. We make our Apps Logo via
 Illustrator.
- **Documentation Tool: Sphinx** is a tool that makes it easy to create intelligent and beautiful documentation, written by Georg Brandl and licensed under the BSD license. It was originally created for the Python documentation, and it has excellent facilities for the documentation of software projects in a range of languages.

Using Sphinx for Python Documentation.

- 1. Workflow.
- 2. Prepare.
- 3. Step 1: Use sphinx- quickstart to generate Sphinx source directory with conf.py and index
- 4. Step 2: Configure the conf.py.
- 5. Step 3: Use sphinx- apidoc to generate re Structured Text files from source code.
- 6. Step 4: Edit index.rst and the generated re Structured Text files.
- 7. Step 5: Build the documents.
- Frame Work: Django is a high-level Python web-based framework that enables the rapid development of secure and maintainable websites. Developed by experienced developers, It takes care of much of the trouble of web development, so you can focus on writing your app without needing to reinvent the wheel.

Project Scope:

From this user will be able to check his credit score and which different banks can offer credit cards at a certain rate with immediate approval. People can also apply for loans through this website with immediate approval and 0% paperwork. Everything online.

Project Vision:

This is an online financial website designed for people who do not have time to visit a bank to get a loan or credit card instead of roaming banks with the approval of loans or credit cards.

Propose Users:

The banking sector is one of the principal sectors in Bangladesh that contributes significantly to the national economy. This large sector contains several banks in various categories. If we consider the ownership of this sector, then it can be classified into four different types of categories -such as Nationalized Commercial Banks (NCBs), Private Commercial Banks (PCBs), Specialized Banks (SPBs), and Trans-National Banks (TNBs).

In Bangladesh, there are a total of 62 states owned, private, foreign, and specialized Banks. The banking system consists of four state-owned commercial banks, 48 private commercial banks, ten specialized development banks, and ten foreign commercial banks.

In Bangladesh, like the other problems, the financial problem is a significant problem. Here, the idea is available, but money does not. We found that, in the rural area, there are very few people who have a complete idea about the banking sector. Many of them do not know how to apply for a loan in the bank. Not only just them but also our proposed users are the people who want to apply for the loan through organizations' help.

Not only a loan, if anyone wants to apply for a debit or credit card, we also can help them with a bit of benefit. We assure you that the services we are going to provide them are world-class and benefit from them.

In brief, our proposed user are those people who want to

- Apply for a bank loan through us.
- Want a credit card within a short period of time.
- Apply for life insurance & investment plan
- Desire to know which bank will be best for him.
- Best suitable plan.
- Category-wise division of multiple sections.

Project Budget:

We are working with three people to develop this web application, and we are learners so that we have to take two months for a fully furnished web app and plan to develop an android app basis later.

So, for the Front end, the back-end cost will be 15000 takas, which is excluded from cloud storage. To publish this web application into the server and buying the domain hosting will cost 10000 takas. We need to collect the data and go to some renowned gym for the project where the transportation and the others bill will also be 10000 takas. So approximately, we need 60K taka for building up the project.

Name	Price	Total Price
Front End Development	10K	
Back End Development	20K	
Host and Publishing	10K	
Data Collection & Others	10K	
Graphics and Designing	10K	
TOTAL		60K

Step of the Work and Milestone:

It is every developer's dream to make their desired project big and closer to the user and make it more user-friendly. We also have the same dream. We build our project only for that user who uses our version because we have not enough money or fanatical support to do this. However, if some Bank or Gov't organization takes the responsibility to give us financial support, we plan to build this application for the IOS user and build a suitable mobile version where the people will find it more useful. Also, we add some more compelling features in our application that will give more satisfaction to the user.

How People will benifited with the project:

Many ways will benefit people by using our services. We know that it is a pandemic time and people worldwide are basically under lockdown. Most bank services begin closed or continue their services limitedly. For the Government rules, people cannot go outside for a long time. So, it is pretty problematic for many users.

People can find here various types of options related to their needs. They can find here and their desired option, which will provide them the result for their issue. They can apply for a bank loan through us, apply for a credit card, and analyze them by comparing with the other bank. In the past, people had to go outside to seek a loan or a credit card. But here, we provide them all information with just one click on our apps. Here the power of the decision belongs to the user at all.

What is the positive impact on environment/social/economic:

We aim to give the best service to our users, to more personalized and accessible financial products within lending, payments, investing, and digital banking. We know that now the technology allows fintech companies to contest with traditional financial institutions by delivering faster, easier, compelling, and often cheaper financial solutions.

Our project has a positive impact on both social, economic sides. There was a time when banking seemed to be the most complicated part of daily life. And as we are new and bringing fresh ideas for our country, we believe it will create a revolution in the banking sector. Besides FinTech websites nowadays making revolutionary changes in the banking and financial sectors globally.

Overall, if anyone wants hassle-free banking, they are always welcome to use our application. There is no safety issue at all because we know that it is a pandemic time, so that it will create a benefit for the users in this pandemic. And economically, it will reduce the pressure from the banking sector of our country.

Monetization

We will ask the user to pay a commission of approximately 5% around it to us when they use our services.

- The bank's services are welcomed to place ads in the website, which will cost 100 BDT per day.
- Google Ad-sense.

Quality

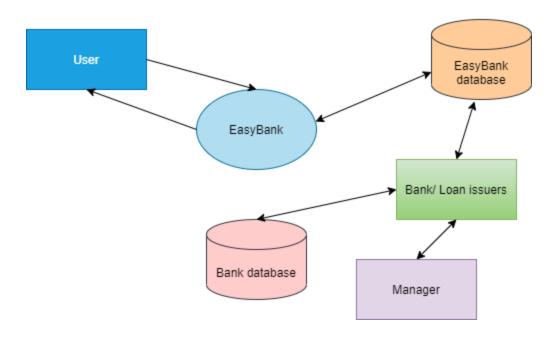
- The UI of the application will be user friendly so that anyone can use it.
- Each and every feature will be arranged in their category wise.

Data Flow Diagram (DFD):

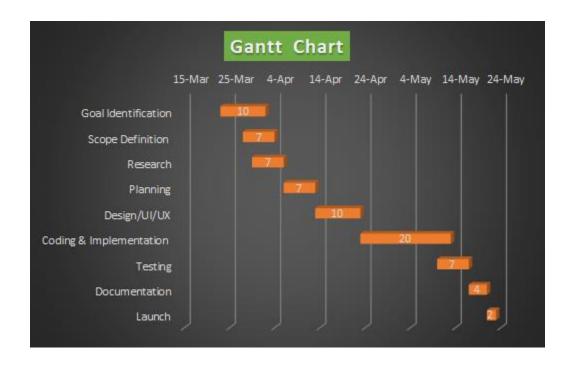
Data Flow Diagram



Data Flow Diagram 2



Gantt Chart:



What are the risks? How will the risks be managed?

Though it is a web-based application, sometimes it can be so that the web application can hamper or lose the database. Though there are a huge number of people who will use it so there will be a "Backup Data Base" and user-friendly "UI Design" to avoid it.

We also put the "Exception Handling" if anything goes wrong. Sometime we may find errors in any of the sections. To solve it we need a plan for the possible exception and make some mechanism to solve the exception automatically.

What is the value for money?

The application we are going to make it is value for money. Here our proposed user here finds a completely "hassle and broker free" baking system. We saw, in most cases, the broker hampers a lot of the public users by promising unnecessary and irrelevant things. They basically don't know anything about banking protocol, just waste the user valuable time. But here the scenery is totally different and people can proceed with their needs comfortably by selecting their desire category.

Conclusion:

Banks play an important role in our economy. It is the most important financial institution for the economic development of a country like us. We have almost 61 banks in total. Our website contains each and every details of these banks. Easy-bank is an easy banking online marketplace. We will also provide different information about those banks who run their bank by following Islamic Shariah, so that people who want to maintain Islamic rules, will find them easier. The main focus of our website is to make banking easier for the people. We will try our level best to serve the people when they visit our website and input their details. Our aim is to provide the best service to our customers, so that they can get every necessary information by setting at their home.

In this pandemic situation most of the banks operate their operations online. Government imposed restrictions on going outside. People can't go outside also in this situation it's not safe. We gather all information about all the banks. People can easily find their desired information through this website. We ensure the information security of our customers. This is a hassle free, easy and secure online marketplace platform.

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