**1. Why we have to have Backend?**

- If we don't have Backend, we can't have users and save data and some infos. It means our website can't grow in the future.

- If we have Backend, we can protect the calculation method and other sensitive information and data.

If we don't have Backend, when you require another calculation method, we have to change our Frontend. It makes Frontend to have low quality code and some bug. Every developers don't choose this way. Logic is for the Backend and view is for the Frontend.

- If we have Backend, we can extend our website more easily and more effectively when you want other functions in our website such as business management and social function and etc.

As you can see, most of big and successful sites have their own chat system. When we start small project, you have to think the future of our project. If we always think only current, you have to spend much money to fix it when you feel more function in the future.

**2. How can we implement Backend and which framework do we have to choose for our project?**

- As for the technique issue, you can trust me because I am senior developer and know what is the the most progressive way to build our website.

- I am going to use Node.js because it is the mainstream in web development and the most suitable Backend for React is Node.js.

**3. Which server do we have to choose in Node.js? Express or Fastify?**

You can choose one of them after you see my description.

- What is the Express?

Express.js, or simply Express, is a back end web application framework for Node.js, released as free and open-source software under the MIT License. It is designed for building web applications and APIs. It has been called the de facto standard server framework for Node.js( This is the concept of Express.js and everybody think so)

-What is the Fastify?

Fastify is a web framework highly focused on providing the best developer experience with the least overhead and a powerful plugin architecture. It is inspired by Hapi and Express and as far as we know, it is one of the fastest web frameworks in town.

In fact, Fastify is around 20% faster than express.js.

100% asynchronous: all the core is implemented with asynchronous code, in this way not even a millisecond is wasted.

Highly performance: as far as we know, Fastify is one of the fastest web frameworks in town, depending on the code complexity we can serve up to 20000 request per second.

Extensible: Fastify is fully extensible via its hooks, plugins and decorators.

- Consideration

The Fastify is faster than Express.js but Express has enough enough experience and is more popular compare to Fastify. And also most of developer choose the Express.js because they can find sample more easily compare to Fastify and also they can get help from big Express.js community. Fastify is new techique and better than Express.js in several aspects like performance but we have to consider this problem.

If you want the best speed and many changes like social network or something, you'd better choose the Fastify. If not, Express.js.

-I will use Nest.js with express or Fastify. Nest.js provide us more progressive way to build our website with Typescript. As you can see Typescript is getting bigger and bigger so we will get more benefit in maintenance in the future.

**4. Requirements of Frontend**

- We have already start the Frontend with React and I think it is very good choice.

- We have to use the state management, Redux and Hook. As you can see, these techniques are the progressive way to implement the website.

- MVP is very important recently so we have to make MVP at first time.

For it, we have to finish all the pages like "how to learn" and "Contact us".

While I finish the Refinance page with Redux and state management, you can prepare the design of two pages. If you do so, after I finish Refinance page,I can start other two page immediately so we can run MVP in a short time.

**5. Rough Estimation**

- completion of finance prototype(As you can see, it is $150)

- completion of finance with state management(As you can see, it is $200)

- the whole Redux system about your project and other two page(about $300 we can discuss it but as you can see, this budget is not much compare to technique level.)

-----------Frontend Completion, MVP completion------------------------------------

- Configuration server(Express or Fastify)

- login signup with local method, google and twitter signin(it is very popular way, you know)

- Refinance RESTful APIs configuration(the kernel part in Backend, you can add several calculation methods)

- some services if you have some idea.

As for Backend, It will take about 2-3 weeks.

I think hourly rate is better than fixed method about Backend for you and me.

As you can see via my profile on upwork, in fact my hourly rate is more than $30 and I will use the latest techniques in your project for Backend.

But I will suggest $15 per hour because we have already made good relationship and understand each other. I really want long-term relatonship with you and I will always guarantee high quality and fast delivery. About that, maybe you will be able to trust me.

Anyway, it is just my rough estimation so we can discuss and negotiate about our project.

I will always work with your idea and suggestion.

Let me know your opinion.