Packt - Lite Book Reader

Motivation

* Motivation/Interest for the project
  + We like this project as it is great in informing fellow computer science students about different aspects of developing software.
  + We believe this project is beneficial for people who want to get to know computer science.
  + Good project for different levels of developers (e.g. beginners)
* Motivation/Understanding of the sponsor
  + Packt allows aspiring Computer Scientists to access helpful textbooks to improve their skills. Access to Computing resources is something which we have benefitted from ourselves, and we therefore would like to help others have good access to these resources.
* Matching of team skills to project
  + HTML, CSS, JS, Machine Learning, Agile Development, MySQL - everyone
  + Big Data - Zaki
  + Web API, Node JS, f, Rest API (Restlet) - Berk
  + Use of Git – Varies between members

Understanding of the brief and context

* Understanding of the brief
  + a solution that enables users with low spec devices to access book content.
  + lightweight HTML/CSS only presentation
  + Use of their APIs
* Analysis and understanding of the wider context of the project
  + The current solution (the website) does not function without JavaScript.
  + Low-spec devices which struggle to keep up with JS-heavy web pages will have a poor viewing experience.
  + We will make use of a Node.JS server to deliver the content in a lightweight HTML/CSS only format to allow a pleasant viewing experience.
* Analysis and understanding of existing products/competitors
  + Amazon Kindle
  + Google Play Books

Preliminary Analysis

* Discussion of applicable tools/libraries/methods
  + use docker to create a consistent development environment to work from.
  + use Liquibase to manage the schema in the database
  + Use Git to perform version control and ensure the solution is well tested
* Proposed initial approach and motivation
  + Css animation?
  + links
* Identification of challenges and issues
  + Learning their APIs, docker, liquibase

Management

* Project management approach discussed
  + We plan to make use of agile project management techniques such as:
* Preliminary/high level project plan and timescales
* Identification of challenges/skills gaps/contingency plans
  + Not everyone in the group is equally skilled at using Git
    - Plan to attend Git lecture, explaining how it is used in the real world
    - Plan to create a Git cheat sheet to allow more experienced members to condense knowledge into an easy to digest form
    - Reduces risk of slippage and dataloss

Style

* Formatting
* Language/grammar/spelling

Refinitiv - Forex

Motivation

* Motivation/Interest for the project
  + Our group is made of many international students who come from countries with very different currencies and exchange rates
  + Our team member Berk has lived in over 7 different countries, and has had to keep up to date with the exchange rates in all the countries he has been in. (I’ve also been interested in them in general, asking my dad the currency of each country he traveled to for business)
  + Some of our members have studied Economics. We can therefore apply our knowledge of how exchange rates work into gamifying the application
* Motivation/Understanding of the sponsor
  + Serves more than 40,000 institutions in approximately 190 countries
  + Provides information, insights and technology that drive innovation and performance in global financial markets.
  + Company founded in 2018
  + Have HQ’s in London, New York, New York, United States.
* Matching of team skills to project
  + Front-end & Back-end development, sockets, teamwork, git, basic foreign exchange, documenting/designing/planning – everyone
  + Working with UIs,

Understanding of the brief and context

* Understanding of the brief
  + Super summary: Forex trading system with GUI and a rates feed
  + Graphing pairs of currencies to see their exchange rate
  + Being able to buy and sell different currencies at the current exchange rates
  + Lots of freedom (“blue sky”) in how to approach the solution
* Analysis and understanding of the wider context of the project
  + Ensure the components communicate using a suitable message protocol
  + Replay historic rates or randomly generate rates.
  + The rates feed component should allow clients to make a socket-based connection, subscribe to currency pairs and receive frequent rate updates.
* Analysis and understanding of existing products/competitors
  + Forex.com: allows foreign exchange trading
    - Makes use of integrated trading tools, real time data, analysis tools (graphing)

Preliminary Analysis

* Discussion of applicable tools/libraries/methods
  + Group has experience using HTML/CSS/Java Swing, could be used to make GUI
  + Can JavaScript can be used to process exchange rate data?
  + Use public API to get exchange rates (European Central Bank or similar)
* Proposed initial approach and motivation
* Identification of challenges and issues
  + Not everyone in the group has experience of web APIs.

Management

* Project management approach discussed
  + Agile project management techniques
* Preliminary/high level project plan and timescales
  + Have a working prototype which satisfies the initial conditions of showing graphs and allowing purchase and sale by the end of first semester
* Identification of challenges/skills gaps/contingency plans

Andy Crabtree - IoT

Motivation

* Motivation/Interest for the project
  + Opportunity to be creative
* Motivation/Understanding of the sponsor
  + Iot
* Matching of team skills to project

Understanding of the brief and context

* Understanding of the brief
  + Create an iot device
  + Create an software so the device users will have privacy and joint control of the device
* Analysis and understanding of the wider context of the project
  + The need for control of these devices as they will become more common In the future
* Analysis and understanding of existing products/competitors
  + Security cameras, heating, washing machine

Preliminary Analysis

* Discussion of applicable tools/libraries/methods
  + Raspberry pi
* Proposed initial approach and motivation
* Identification of challenges and issues
  + Lack of experience with iot devices
  + Coming up with ideas for iot device
  + Working with raspberry pi

Management

* Project management approach discussed
* Preliminary/high level project plan and timescales
* Identification of challenges/skills gaps/contingency plans