

IFSC 3360: System Analysis and Design

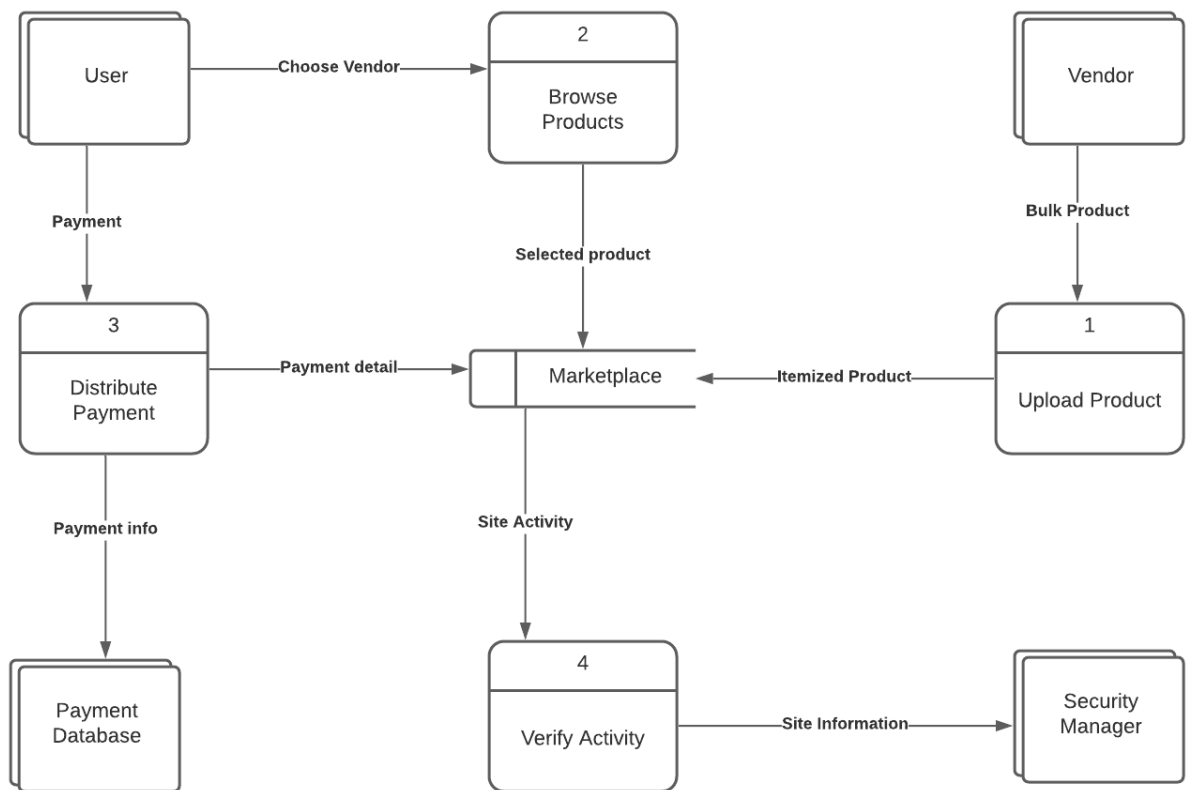
Final Project Report

Amazon Hub

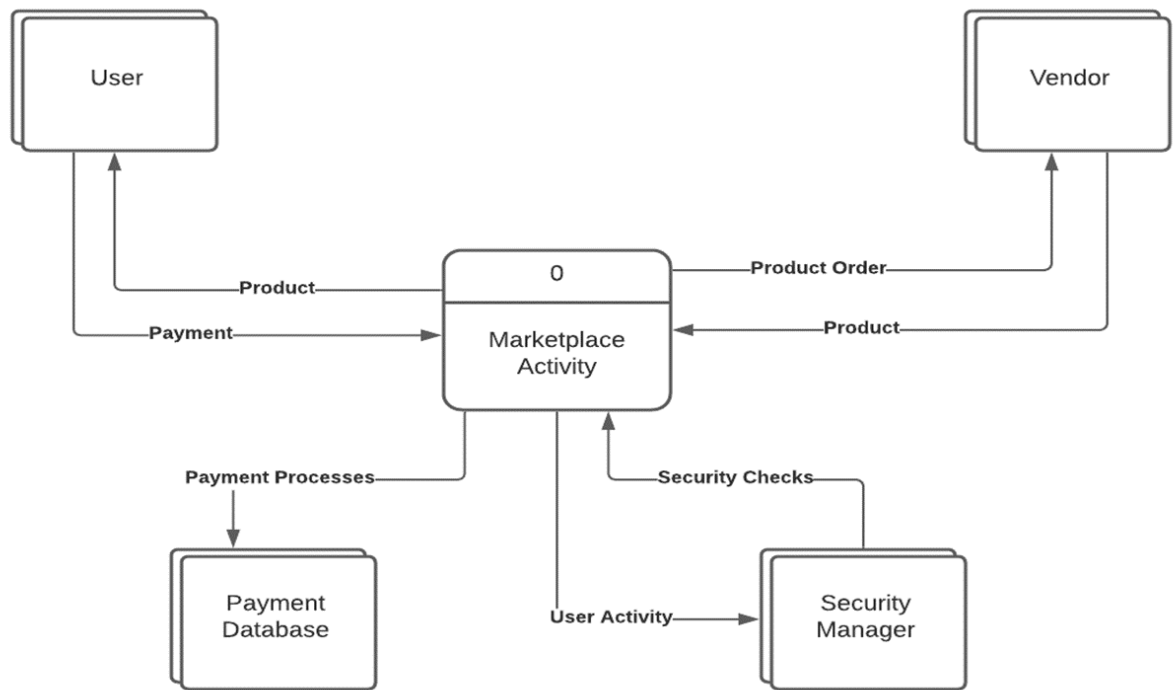
By Baker Rodgers

Amazon Hub is the next step for Amazon to take in developing their brand to be resilient to how volatile markets are to changes in technology and user desire. Unlike Facebook's name change to Meta, Amazon Hub is the integration of every Amazon service into one centralized site and not just a name change. The main goal of Amazon Hub is to provide an innovative marketplace experience for the Prime user and vendor alike, while simultaneously providing a seamless transition into every other Amazon service (Prime Video and Music, Audible, Twitch, and Whole Foods). I also envision Amazon Hub to be fully customizable, this allows for shoppers to place the marketplace in a quick access area, and this is interchangeable for any service. Developing a center for Amazon activity will exponentially increase traffic and allow for new security measures to be implemented. Since every other Amazon service is being implemented into the Hub it is only fitting that AWS has a place at the table too. AWS will be the main hosting service for the Hub, vendor's individual sites, and the new cloud security service. This allows Amazon to build the new security from the ground up and without third party limitations. Such a site with access to every service and financial data of its users can raise blood pressures of those defending such a site, but with basic and advanced measures Amazon Hub can be an iron fortress. 2 factor authentication is required by every user, vendor and developer that has access to the site. A cloud based VPN proxy system would be used through AWS to allow secure and relatively quick access to any aspect of the Hub. Amazon Hub would give more power to the vendors to develop their brand on the Hub, whereas to the old Amazon style of just uploading products with no personality. Through the AWS system vendors will have their own personalized site connected to the main marketplace, this allows for traffic to remain on the Hub and not be deviated towards another site. The Hub will also introduce a social panel for users and vendors to communicate through by being alerted of new products and sales, and encourage interaction between users and towards vendors. Amazon Hub is an improvement of an old system, but also is a completely new system with new and improved features. It is a necessary progression with how trends and even technology are adapting to the everchanging

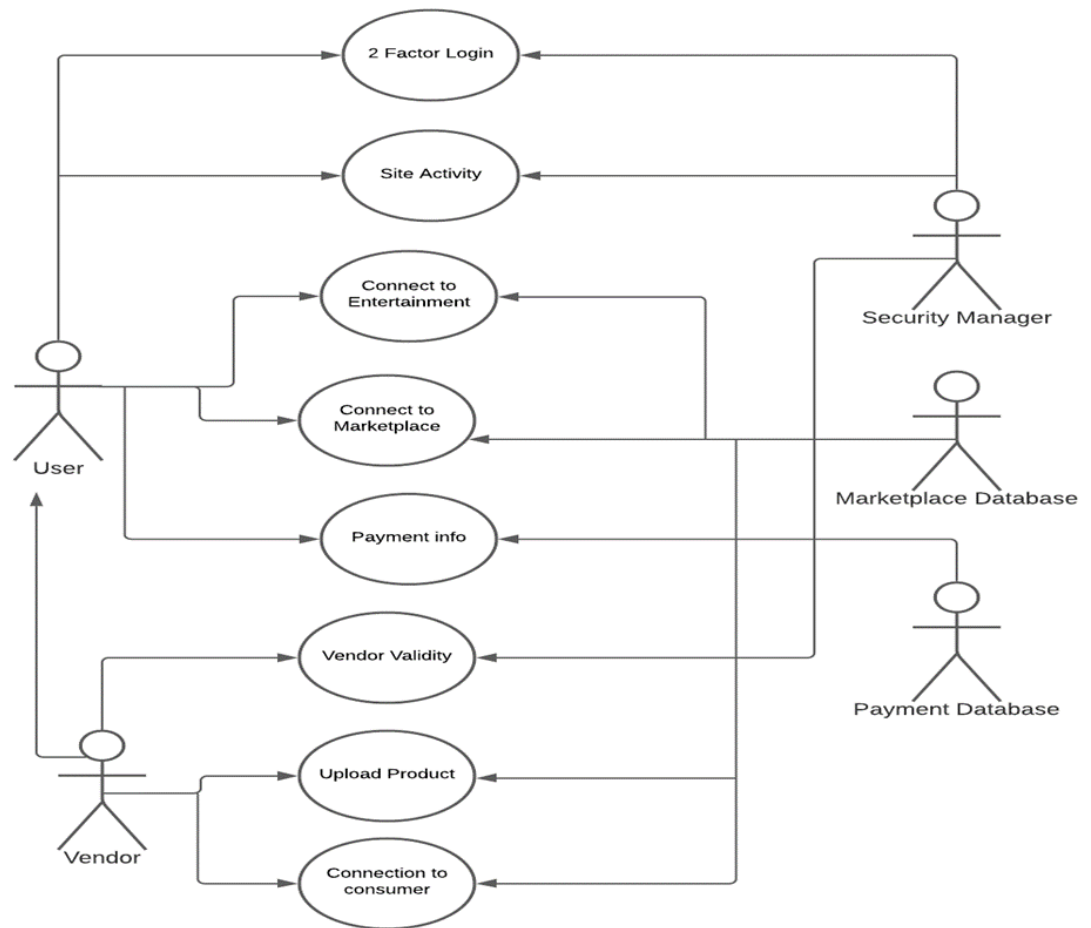
times. By having a central site for everything Amazon will boost ad revenue on the site, induce curiosity for other services, and reduce the need for multiple sites which would overwhelm some users. It also allows for the mobile component of the site to be just as powerful as the web version through cloud hosting and not depending on the device's power. This allows for Amazon Hub to compete as an integrated service with Meta and even Google itself. I feel that this shift from the traditional way to browse media and shop that has been around for 15 years plus allows Amazon and even technology to take the next step in its evolution.



-In this Data Flow Diagram it illustrates how the site will work as a whole, in that with the user's login and verification from the security manager, they can begin to browse the site and use it in a marketplace setting.



-In this DFD 0 model it shows a macro level of how the site will operate, in that through the user's verified marketplace activity will allow him to purchase products that the vendor uploads and his payment is stored for later purchases.



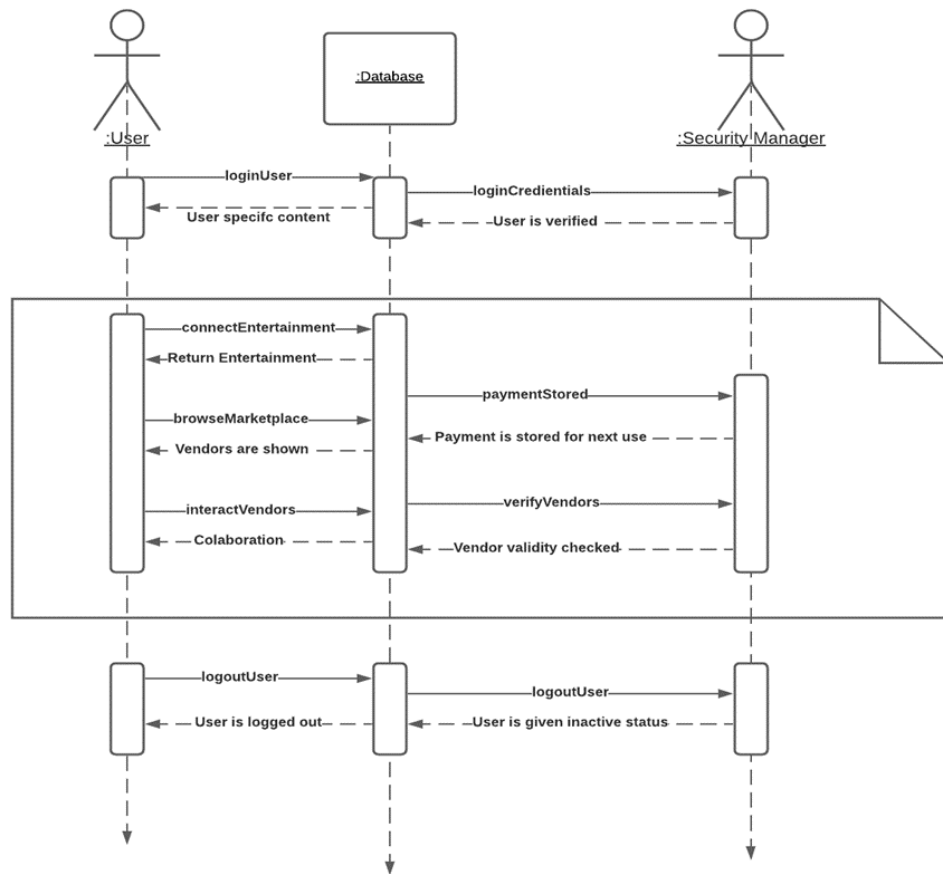
-For this Use Case Model it shows the relationships that each aspect of the site shares with one another. The vendor is a user, yet he can upload products to the marketplace and communicate to other users. This is all after the security manager has verified both the user and vendor.

Success Scenario:

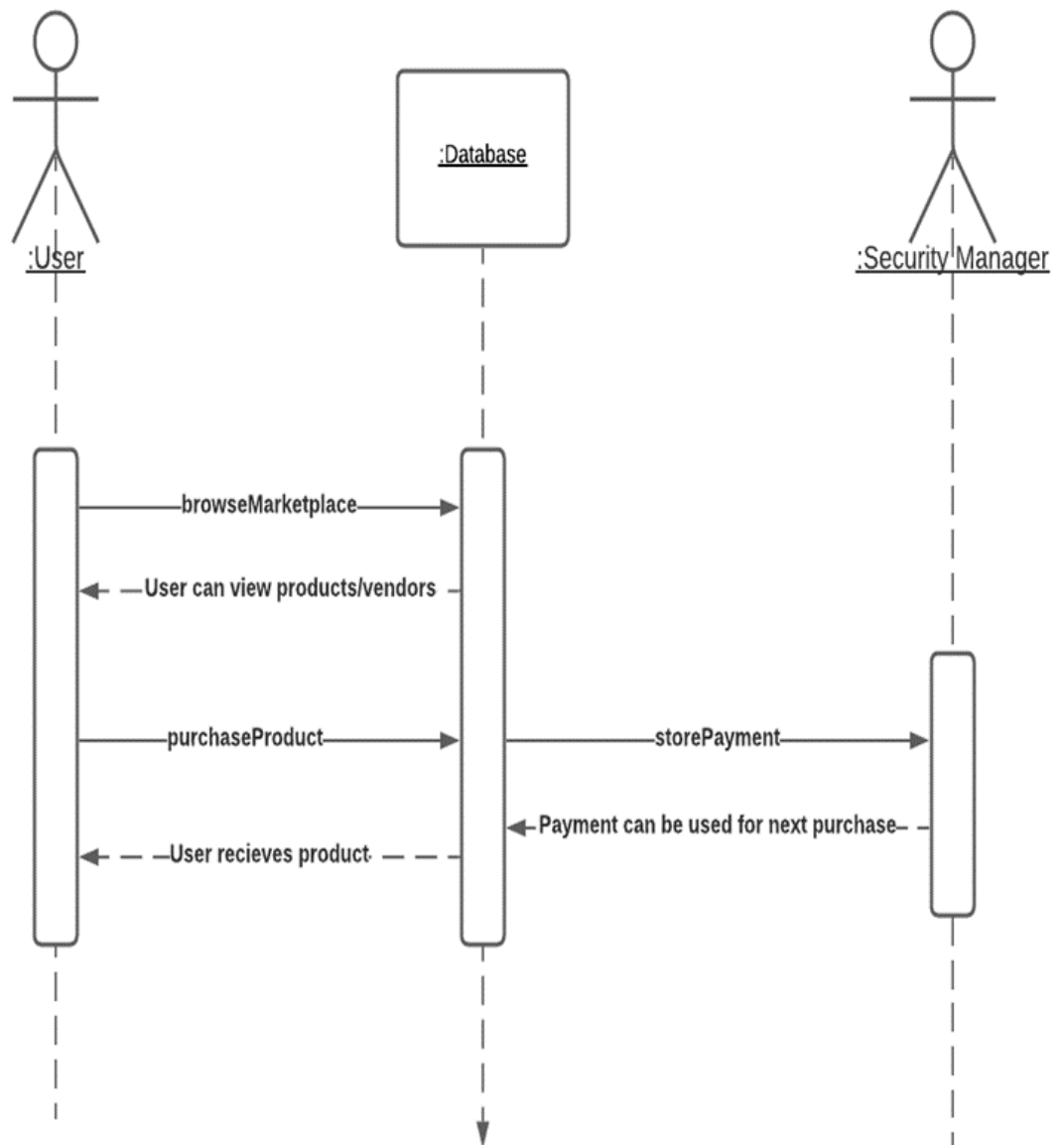
The user can connect to the marketplace, purchase a product that has been uploaded by a vendor, and securely enter their payment information.

Dressed Cases:

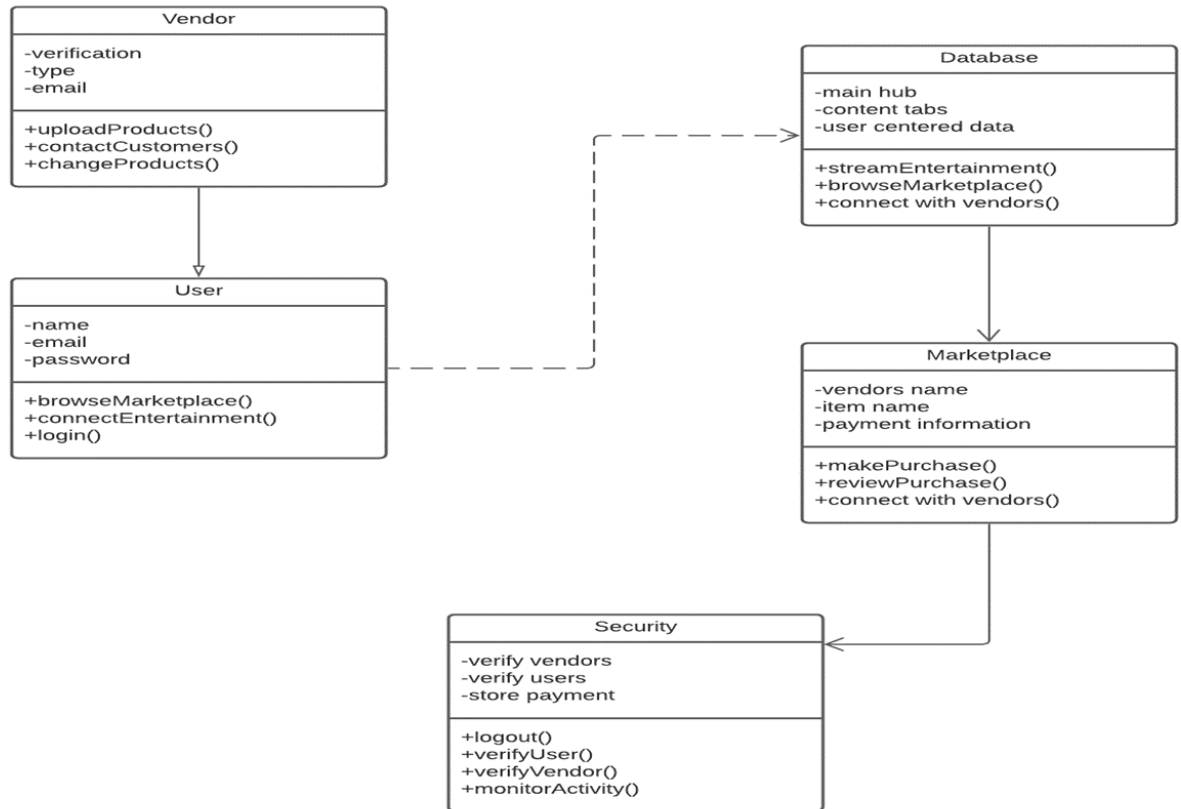
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-For this SSD model it shows how the User can go from the Marketplace to entertainment to interacting with the vendors however many times they want. While this loop is going on the Security Manager is monitoring the activity of the user and who/what they interact with.



-For this SD model it shows the process in a micro light. It focuses on the user's ability to browse and purchase products from the marketplace, while having their payment data stored for their next iteration of shopping.



-In this Class Diagram it shows the relationship between the User and the Database and activities that each can accomplish. Association is between Database, Marketplace, and Security. From the Database the user can browse the Marketplace, and through the Marketplace the vendor is verified through Security. Dependency is with User and Database, due to without the user the Database has no purpose or even a way to be used. A generalization is that the Vendor is a subclass of the User, in that the Vendor is a user of the site yet they can sell products to other users.

I would go about the planning process totally differently, in that I would have a rough idea of what the system would look like over every diagram. This would streamline my diagram creation process and allow me a clear picture of what needs to change. I also would go into more depth on certain diagrams that require more than a basic example. Other than those I do not see anything else that I would do differently.



I wanted to add a very minimal mock up of what Amazon Hub would look like to help the imagination. The colors of the site are all up to user discretion, yet the UI format would stay the same. Starting at the top bar, there are all the Amazon services (Amazon video and music, Whole Foods, and Twitch) that the user specified they want to have immediate access to. The picture in the top right corner is the user's profile portal where they can; customize the site, change payment info, and general settings. Moving down from the profile portal, we have the users favorite vendors that they have picked or visit the most. Under that is the Social panel where vendors can tell users of sales and discounts, and get trending items throughout the site. To the left of the social tab is the Marketplace, where users see items they have searched for or from vendors they have entered their website.