**Business Case: HouseHunt**

**Introduction**

| **Business Case Conceptual Structure** | **Definitions** |
| --- | --- |
|  | **Customer:**  A customer is an individual or business that purchases another company's goods or services.  Customers are important because they drive revenues; without them, businesses cannot continue to exist.  **Supplier**:  A supplier is a person, business, or entity that provides products, data or services to another entity.  **Stakeholder**:  A person with an interest or concern in something, especially a business.  Stakeholders encompass all individuals or groups who have a vested interest in the performance of the business.  **Business Model:**  The term *business model* refers to a company's plan for making a profit. *Examples: Freemium, Subscription, Advertising, etc.*  **Distribution Channel:**  A distribution channel is a path that a product or service could take on its way to market. What's a direct distribution channel? A direct distribution channel is one where a company sells directly to the consumer, usually through their website or retail store. |

**Team No: 1**

**Application Name: HouseHunt**

| **Category** | **BC Section** | **Questions** | **Answers** |
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| WHAT? | **Product Overview** | *Give a brief description of the proposed software product.* | **HouseHunt** is a modern, responsive web application designed to simplify the real estate search process. It enables property seekers to explore listings effortlessly based on key criteria such as location, price, and property type, while providing property sellers with intuitive tools to manage and showcase their listings. The platform prioritizes simplicity, convenience, and accessibility, offering advanced search capabilities, detailed property pages with high-quality images and descriptions, and secure communication between buyers and sellers. Designed for seamless functionality across desktop, tablet, and mobile devices, HouseHunt delivers a consistent and user-friendly experience, making real estate transactions more efficient and accessible for all users. |
| **Value Propositions** | What Customer business needs are we satisfying? | 1. **Convenience for Property Seekers:**    1. Users can search for properties anytime and from any device, leveraging the responsive design.    2. Advanced filters allow users to find properties matching their exact needs. 2. **Efficiency for Property Sellers:**    1. Property owners and agents can manage their listings, track inquiries, and connect with potential buyers or tenants directly through the app. 3. **Enhanced Decision-Making:**    1. Comprehensive property details, including images, descriptions, and pricing, provide users with all the information needed to make informed decisions. |
| What value do we add to the Customers? | 1. **For Property Seekers:**    1. Simplified search and filtering options.    2. Access to detailed property information, including images, location maps, and market trends. 2. **For Property Sellers:**    1. Ability to manage and update property listings with ease.    2. Direct communication options for connecting with interested buyers. |
| **Type of Business Model** | What type of a business model do we adopt? | * **Freemium Model:** Basic search and filter functionalities are free; advanced analytics and priority listings require a subscription. * **Brokerage Model:** Revenue generated from commission fees on successful real estate transactions. * **Advertising Revenue:** Targeted ads for real estate agencies, mortgage lenders, and home services. * **Partnership-Based Revenue:** Earnings from referral fees via collaborations with lenders and property management services. |
| **Key Resources** | What Key Resources do our value propositions require? | 1. **Technology & Infrastructure**    * **Web & Mobile Development Tools:** Free frameworks like React.js, Node.js, and MongoDB for building the platform.    * **Cloud Hosting & Storage:** AWS Free Tier, Heroku Free Tier, or Firebase for hosting and data management.    * **Security & Authentication:** Free authentication tools like Firebase Auth or AWS Cognito for user login and data protection. 2. **Human Resources**    * **Development Team:** Team members responsible for coding, testing, and maintaining the platform.    * **Marketing Team:** Focuses on organic reach through SEO, social media, and partnership marketing.    * **Customer Support Team:** Assists users with onboarding, troubleshooting, and inquiries.    * **Business & Partnerships Team:** Engages with real estate agencies, landlords, and home service providers for collaborations. 3. **Platform & Content Management**    * **Property Listings Database:** Stores and manages real estate data, images, and user profiles.    * **Communication Tools:** Secure messaging system for buyers and sellers to connect.    * **Analytics & Reporting:** Free tools like Google Analytics to track platform engagement and improve user experience. |
| What are our Distribution Channels? | * **Website:** The primary platform for accessing property listings and tools. * **Social media:** Promoting listings and engaging with users through platforms like Facebook, Instagram, and Twitter. * **Collaborations:** Partnering with real estate agencies, property developers, and listing websites for broader outreach. |
| **Technology** | What technology will we use to build the product? | 1. **Frontend Technology:**    * **React.js** – For building a dynamic and responsive user interface.    * **Tailwind CSS** – For efficient and customizable UI styling. 2. **Backend Technology:**    * **Node.js with Express.js** – To handle server-side logic and API requests.    * **MongoDB** – A NoSQL database for scalable and flexible data storage. 3. **Deployment & Cloud Infrastructure:**    * **AWS EC2** – To host application servers and ensure scalability.    * **AWS S3** – To store property images, user data, and other static assets.    * **AWS RDS** – For managing relational databases if needed.    * **Jenkins** – For CI/CD (Continuous Integration and Deployment) automation.    * **Docker** – To containerize applications for easy deployment and scalability. |
| Is it a mobile or desktop application? | HouseHunt is a web-based application designed for both desktop and mobile access. It features a fully responsive design, ensuring seamless functionality across various devices, including desktops, tablets, and smartphones.  Users can browse property listings, manage postings, and communicate securely from any device without needing a separate mobile app. |
| **Known Prototypes** | What are the know prototypes of your product?  *Reference some known portals on the Internet that are similar to your product. You will use these prototypes for developing business, user requirements.* | * **Zillow** ([www.zillow.com)](http://www.zillow.com/) – A comprehensive real estate marketplace offering property listings, home value estimates, and agent connections. * **Realtor** ([www.realtor.com)](http://www.realtor.com/) – A property search platform providing detailed real estate listings, mortgage calculators, and neighborhood insights. * **Redfin** ([www.redfin.com)](http://www.redfin.com/) – A technology-driven real estate platform that combines property listings with agent services and advanced market analytics. |
| WHO? | **External Customers** | Who are our Customers? | * **Primary Users:** Individuals searching for properties to buy, rent, or lease. * **Secondary Users:** Real estate agencies, landlords, and property developers. |
| **External Suppliers** | Who are our Suppliers?  *Does the system exchange data with external systems? For example, banks, delivery contractors, restaurants, etc.* | * **Financial Transactions Integration:** Secure payment processing via Stripe, PayPal, or bank APIs for handling subscription payments and premium listing fees. * **Real Estate Market Data Integration:** Automatic updates via MLS (Multiple Listing Services) and public property records. * **Mortgage and Loan Services:** Integration with mortgage lenders to provide financing options and pre-approval checks for buyers. * **External Service Providers:** Collaboration with home inspectors, moving services, and legal document processing agencies. |
| **Internal Stakeholders** | Who are our internal Stakeholders?  *Do we need a product development group?*  *Do we need a sales group?*  *Do we need a finance group (accounts payable, receivable)?*  *Do we need a customer support team?*  *Do we need an advertising management group?* | 1. **Product Management** – Defines the app’s features, roadmap, and business strategy. 2. **Marketing Team** – Promotes the platform, attracts users, and manages advertisements. 3. **Customer Support** – Assists users with inquiries, technical issues, and platform support. 4. **Finance Team** – Manages subscriptions, payments, and advertising revenue. 5. **Sales & Partnerships Team** – Builds relationships with real estate agencies and property developers. 6. **Compliance & Legal Team** – Ensures data privacy, fraud prevention, and regulatory compliance. |
| WHY? | **Expected Benefits to the Customer** | Why do we believe our new product will be better than those already existing on the market? | 1. **For Property Seekers:**    * Ease of access to a wide range of property options.    * Advanced filtering for customized searches.    * Detailed property insights for better decision- making. 2. **For Property Sellers:**    * Increased visibility and reach to a targeted audience.    * Tools to manage listings and track performance metrics. |
| Why the Customers would want to use our system? | * **User-Friendly Design:** Intuitive and responsive interface suitable for users of all tech skill levels. * **Convenience:** Centralized platform for all real estate needs. * **Cost-Effective:** Free access to core features with affordable premium options. * **Trust:** Verified listings and reviews ensure reliability. |
| HOW? | **System Use** | How will the External Customers use the system?  What is the main system use scenario for the External Customers? | 1. **Property Seekers (Buyers & Renters):**    * Register an account and set preferences for notifications and alerts.    * Browse properties using an intuitive search interface with filters such as location, price, and property type.    * View high-quality images, descriptions, virtual tours, and neighborhood insights.    * Request property visits and communicate with sellers securely via the in-app messaging system    * Calculate mortgage options and explore financing plans from integrated mortgage lenders. 2. **Property Sellers (Agents, Landlords, & Developers):**  * Create an account and manage their property listings. * List properties with detailed specifications, images, and pricing details. * Manage inquiries and track engagement analytics for each listing. * Highlight listings through premium services for greater visibility. |
| What is the main system use scenario for the Internal Users? | 1. **Product Management Team:**    * Defines the app’s features, roadmap, and user experience improvements.    * Monitors system performance and user engagement analytics. 2. **Marketing Team:**    * Promotes the platform through digital campaigns, SEO, and social media.    * Manages advertisements and partnerships to increase user acquisition. 3. **Customer Support Team:**    * Assists users with inquiries, technical issues, and account management.    * Handles complaints, verifies property listings, and ensures compliance. 4. **Finance Team:**    * Manages subscription payments, advertising revenue, and financial reports.    * Processes refunds, billing issues, and revenue tracking. 5. **Sales & Partnerships Team:**    * Builds relationships with real estate agencies, property developers, and landlords.    * Negotiates deals for premium listings and partnership collaborations. 6. **Compliance & Legal Team:**    * Ensures all property listings meet legal and ethical guidelines.    * Handles fraud detection, user verification, and data privacy regulations. |
| **Revenue Generation, Revenue Streams** | How will we make money?  *Such as Subscription fees, renting, leasing, licensing, brokerage fees, advertising sales, etc.* | 1. **Subscription Plans**    * Property sellers can pay for premium features such as priority listings and analytics.    * Estimated revenue potential: If 500 sellers subscribe at $50/month, this could generate around $300,000/year. 2. **Advertising Fees**    * Real estate businesses, mortgage providers, and home service companies can place targeted ads.    * Estimated revenue: $100,000/year from ad placements. 3. **Partnerships & Referral Fees**    * Collaborations with mortgage lenders, real estate agencies, and home service providers.    * Estimated revenue: $50,000/year from referral commissions. 4. **Projected Costs (Zero-Budget Approach)**   Since this is a capstone project, the platform will rely on free resources and open-source tools for development:   * + **Platform Development:** Built by the team using free frameworks like React.js, Node.js, and MongoDB.   + **Hosting & Deployment:** Utilize free tiers of platforms like AWS Free Tier or Heroku Free Tier for initial deployment.   + **Marketing:** Use social media and organic SEO for cost-free promotions.   + **Operations:** Managed by the team without requiring initial financial investment.  1. **Potential Profitability**    * Estimated first-year revenue: $450,000    * Estimated first-year costs: $0 (team-driven development, free tools)    * Projected profit: $450,000 (all revenue reinvested into scaling operations) |