**Milestone 1**

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# **PROJECT CHARTER**

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| 1. General Project Information | | | | | | | | |
| Project Name: | | | **House Discovery with AI** | | | | | |
| Executive Sponsors: | | | **Zillow** | | | | | |
| Department Sponsor: | | | **Mrs. Vanessa Coote** | | | | | |
| Impact of project: | | | To make finding the best possible home simple through the use of Artificial Intelligence, and the current housing market. | | | | | |
| 2. Project Team | | | | | | | | |
|  | **Name** | | | **Department** | | **Telephone** | **E-mail** | |
| Project Manager: | Essence Ochoa | | | Project Management | | 407-506-5876 | esscence1.ochoa@famu.edu | |
| Team Members: | Isaac Royal | | | IT & Engineering | | 240-470-9405 | isaac1.royal@famu.edu | |
|  | Chelsa Lowery | | | Real Estate and Housing | | 863-529-6075 | chelsa1.lowery@famu.edu | |
|  | Keshawn Ross | | | IT & Engineering | | 786-474- 7539 | keshawn1.ross@famu.edu | |
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| 3. Stakeholders *(e.g., those with a significant interest in or who will be significantly affected by this project)* | | | | | | | | |
| Zillow | | | | | | | | |
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| 4. Project Scope Statement | | | | | | | | | |
| **Project Purpose / Business Justification** *Describe the business need this project addresses* | | | | | | | | | |
| **The outcome of this is an app and website that allows the user to enter their detailed preferences and the program provides results in their selected area.** | | | | | | | | | |
| **Objectives (in business terms)** *Describe the measurable outcomes of the project, e.g., reduce cost by xxxx or increase quality to yyyy* | | | | | | | | | |
| * Provide every user with their ideal home based off their preferences, location, and budget. * Use AI to create and automate a one-of-a-kind experience for each user. * Assist real estate agents and companies with management of the housing market. | | | | | | | | | |
| **Deliverables** *List the high-level “products” to be created (e.g., improved xxxx process, employee manual on yyyy)* | | | | | | | | | |
|  | | | | | | | | | |
| **Scope** *List what the project will and will not address (e.g., this project addresses units that report into the Office of Executive Vice President. Units that report into the* *Provosts Office are not included)* | | | | | | | | | |
| This project addresses people that are looking to get into the housing market, weather that be buying or selling their property. We are not advising those who are seeking interior designers or who are trying to finalize sales through us. This is to strictly advise for homes and help locate the perfect home for our users. The house searching app will include user registration/login, search functionality based on location, style, and amenities, detailed property listings with images and pricing, filter and sorting options, interactive maps, save favorites, contact agents, integration with third-party APIs for real-time data, user reviews, notifications, and an admin panel for management. | | | | | | | | | |
| **Project Milestones** *Propose start and end dates for Project Phases (e.g., Inception, Planning, Construction, Delivery) and other major milestones* | | | | | | | | | |
| Inception, Planning, Programming, Releasing, Updating | | | | | | | | | |
| **Major Known Risks (including significant Assumptions)** *Identify obstacles that may cause the project to fail.* | | | | | | | | | |
| |  |  | | --- | --- | | **Risk** | **Risk Rating (Hi, Med, Lo)** | | The changing and unpredictable climate of the housing market. | High | | The advancement of Artificial Intellegence and its affect on society as a whole. | Medium | | Cost to manage AI and housing related affairs | High | | | | | | | | | | |
| **Constraints** *List* a*ny conditions that may limit the project team’s options with respect to resources, personnel, or schedule (e.g., predetermined budget or project end date, limit on number of staff that may be assigned to the project).* | | | | | | | | | |
| Currently, we only have a few developers, so it may be difficult to get the application up and running by a specific deadline. The schedule of our programmers is also very tight, so they can only work on the project part-time. | | | | | | | | | |
| **External Dependencies** *Will project success depend on coordination of efforts between the project team and one or more other individuals or groups? Has everyone involved agreed to this interaction?* | | | | | | | | | |
| This project will depend on realtors and people that are selling their houses. They have to allow us to show their house on the website. However, through our partnership with Zillow, this issue can be mitigated. Zillow has agreed to share their Housing database with the project team. | | | | | | | | | |
| 5. Communication Strategy *(specify how the project manager will communicate to the Executive Sponsor, Project Team members and Stakeholders, e.g., frequency of status reports, frequency of Project Team meetings, etc.* | | | | | | | | | |
| Project Managers and employees will communicate through business software such as Microsoft Office 365, Outlook, Project Plan 365, Zoom, and in person for team and project meetings. | | | | | | | | | |
| 6. Sign-off | | | | | | | | | |
|  | | | Name | | | Signature | | | Date (MM/DD/YYYY) |
| Executive Sponsor | | | Zillow | | |  | | | 2/19/2024 |
| Department Sponsor | | | Mrs. Vanessa Coote | | |  | | | 2/19/2024 |
| Project Manager | | | Essence Ochoa | | |  | | | 2/19/2024 |
| 7. Notes | | | | | | | | | |
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# SWOT Analysis

### Strengthens

1. **The Recent Evolving and Tremendous Advancement in AI Technology:** Artificial Intelligence throughout the years has made a steady increase. However, with its implementation in the entertainment, coding, and robotics atmosphere, it is growing at an almost uncontrollable rate.
2. **Overall Housing Cost in the State of Florida:** According to one of our stakeholders in Zillow, as of December 31, 2023, the average Florida home value has shown a 2.0% increase over the past year, which reflects a thriving real estate market

### Weakness

1. **Lack of People and Contractors for Real Estate Purposes:** For our specific project, we require a lot of outside resources and knowledge in order to keep track of the housing market and provide our users the best possible deal for their home.
2. **Location:** This is a big part of Real Estate in general because some places may be more lucrative than others, providing opportunities for one set of users, and tribulations for another. Some locations also have a bigger population number, making finding an available dream home difficult.

### Opportunities

1. **Partnering with Large Scale Housing Contractors and Businesses:** Just like any other company, the opportunity for collaboration is always available, and Housing AI can serve as a suitable business partner for any real estate firm with the goal of selling an ideal home to any buyer.
2. **The Increase in Real Estate Agents Since the Global Pandemic:** After Covid, the general real estate market was transformed, causing a 14.5% increase in active agents. This will make Housing AI crucial to any agent looking to gain notable success when entering the real estate market.

### Threats

1. **The Unpredictability of the General Real Estate Market in the Nation as a Whole**: Much like the stock market, the real estate market is constantly changing, with different external factors having a major impact on the long term value of buying a home.
2. **The Vast Changes in Technology**: As the evolution of Artificial Intelligence can be seen as a benefit, the technology used to produce and manage it is ever changing. As a result, the cost to upgrade or maintain our AI could become increasingly expensive, leading to less income, and slower success in the coming future.

Budget and Time Estimates:

**Planning and Research (2-4 weeks):**

Define the target audience and their needs.

Research competitors and identify unique selling points.

Determine the features and functionalities of the app.

**Design (4-6 weeks):**

UI/UX design: Wireframing, prototyping, and designing the user interface.

Graphic design: Creating logos, icons, and visual assets.

Design iterations based on feedback.

Budget Estimate: $5,000 - $10,000

**Development (12-16 weeks):**

Frontend development: Implementing the user interface designs.

Backend development: Building the database, server-side logic, and APIs.

Integrating third-party APIs for location data, school information, etc.

Testing each module for functionality and compatibility.

Budget Estimate: $20,000 - $50,000

**Testing and Quality Assurance (4-6 weeks):**

Manual testing: Testing the app on different devices and platforms.

Automated testing: Writing scripts to automate testing procedures.

Bug fixing and optimization.

Budget Estimate: $5,000 - $10,000

**Deployment and Launch (2-4 weeks):**

Publishing the app on major app stores (e.g., Apple App Store, Google Play Store).

Setting up analytics tools to monitor app performance.

Marketing and promotion activities for the app launch.

Budget Estimate: $3,000 - $7,000

**Maintenance and Support (Ongoing):**

Regular updates to fix bugs and introduce new features.

Providing customer support and addressing user feedback.

Budget Estimate: Variable, depending on the scale of updates and support needed.

**Conclusion:**

Total Budget Estimate: $33,000 - $77,000

Time Estimate: Approximately 24-36 weeks (6-9 months)

Team Contract

Team Name: Black

Date: 2/19/2024

GOALS:

* Simplify Home Searching: Utilize Artificial Intelligence to streamline the home search process, making it easier and more efficient for users.
* Provide Personalized Recommendations: Develop algorithms that can analyze user preferences and market trends to offer tailored home recommendations.
* Enhance User Experience: Aim to create a seamless and user-friendly interface that ensures a positive experience for every user.
* Stay Updated with Market Trends: Continuously monitor and analyze the housing market to provide users with the most accurate and up-to-date information.

Skills to Develop or Refine:

* AI Development: Enhance proficiency in artificial intelligence and machine learning algorithms.
* Data Analysis: Improve skills in data analysis to interpret market trends and user preferences accurately.
* User Interface Design: Refine abilities in designing intuitive and visually appealing user interfaces.
* Communication: Strengthen communication skills for effective collaboration and feedback exchange within the team.

EXPECTATIONS:

* Attendance at Meetings: Attend all scheduled meetings unless prior notice is given.
* Participation: Actively engage in discussions and contribute ideas and insights during meetings and team communication channels.
* Frequency of Communication: Maintain regular communication with team members to ensure progress updates and address any challenges promptly.
* Quality of Work: Strive for excellence in all tasks and deliverables, meeting deadlines and adhering to quality standards.

POLICIES & PROCEDURES:

* Meeting Schedule: Meetings will be held bi-weekly on [specified day and time].
* Communication Channels: Utilize [specified platform] for team communication and collaboration.
* Task Assignment: Tasks will be assigned based on individual strengths and expertise, with clear deadlines and expectations outlined.
* Feedback Mechanism: Establish a feedback loop where team members can provide constructive criticism and suggestions for improvement.

CONSEQUENCES:

* Non-Performance: Failure to meet goals, expectations, or adhere to policies may result in reassignment of tasks or additional training/support.
* Repeated Non-Performance: Persistent non-performance may lead to further evaluation and potentially removal from the project team.

We acknowledge and agree to these goals, expectations, policies, procedures, and consequences, understanding that they are essential for the success of our project in simplifying home searching through Artificial Intelligence.

Team Member: Essence Ochoa

Team Member: Isaac Royal

Team Member: Chelsa Lowry

Team Member: Keshawn Ross

References

*Zillow*. (2019). Zillow.com. <https://www.zillow.com>