**CS691 - Computer Science, Fall 2019**

**Project Initiation Document**

Project: DesignHub Web Application

Project Manager: Mateo Terselich

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Table of Contents

Document Purpose 5

Background to the Proposed Work 5

Vision 5

Project Objectives 6

Project Scope 6

Business Case 6

Assumptions 8

Constraints 8

Risk Management Strategy 8

Deliverables 10

Stakeholders 11

Project Team 12

Project Plan 13

Project Controls 15

Communication Plan 15

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Approvals

This document requires the following approvals:

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| **Name** | **Role** | **Signature** | **Date** | **Version** |
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| **Cesar Santana** | Product Owner |  | 9/20/2019 |  |
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| **Agil Madinali** | DBA |  | 9/20/2019 |  |
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Distribution

This document has been distributed to:

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| **Name** | **Role** | **Date of Issue** | **Version** |
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| Matthew Tice | Leader Business Analyst | 9/20/2019 | 1.1 |
| Mingming Qiu | Lead Developor | 9/20/2019 | 1.2 |
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| Zixin Yang | Developer | 9/20/2019 | 1.3 |
| Mateo Terselich | Project Manager | 9/20/2019 | 1.3 |
| Jessica Thomas | QA Tester | 9/20/2019 | 1.3 |

**Document Purpose**

This document is the Project Initiation Document (PID) for the DesignHub Web Application Project. The purpose of this document is to define the project and form the basis for its management and the assessment of overall success. It will communicate the scope, objectives, tasks, roles and responsibilities, costs and deliverables relating to the DesignHub Web Application Project.

Specifically this document will cover the following areas:

* An outline of the approach to be adopted for the implementation of the DesignHub Web Application
* Details of the roles and responsibilities, functions and activities
* Details of the processes and products to be covered and the associated benefits and outcomes together with the impact they will have on the business
* Quality records, risks, project controls and exceptions

This document will also serve as a means of communicating key aspects of the project to Stakeholders of the DesignHub Web Application. Once approved, the Project Initiation Document will be the baseline against which the success of this project will be measured.

**Background to the Proposed Work**

The medium of art is always evolving and expanding. The arts is a vehicle that provides insight into our society, and sits on the pulse of what is new and exciting. A budding artist who is moving at the speed of light riding the wave of his or her creativity may or may not have local support or recognition. Some local venues may place their artwork for display and partner with these artists to help spread the reach of their work. These partnerships are helpful however, it often hinders the extent their work can be known. On the other hand, art collectors and enthusiasts may be looking for something new and innovative. Seeking a piece that may give their home a new vista. Original artwork can spark excitement, reflection, and introspection in the lives of others.

Now the dilemma can often be how the aim of the artist and collector can seamlessly come together.  Where would the artist have the ability to have their voice and vision be, both seen and appreciated? What if there was a space where these entities could productively collide. Where the artist can present their vision in a digital art gallery and the collector can admire, support, and collect the work of countless artists. DesignHub aims to be the bridge to bring these two together. DesignHub will:

* Provide artists the ability to post their artwork that can range from paintings, furniture, and other items on a secure site. Where they can provide insight into the creation and materials used to bring the idea to life.
* Give collectors the ability to view art based on their preferences and connect them with ideas that ignite and excite them as lovers of art.
* Generate awareness to specific communities, gathers for both artist, and collects to connect with others who share their ideas and can help further their appreciation for any artistry.

This project will address the above issues, providing a new and sleek platform to make connecting and interacting with art graceful and straightforward.

**Vision**

The goal of this project is to provide a medium for designers to have greater control over what items are listed and how they are presented to consumers, all under the main objective of selling these products through the website. It provides a one-stop-shop for both designers wanting to list their products and consumers that wish to purchase them.

**Project Objectives**

RELEASE 1 – Designer Listing Demo with features list (for sellers listing their product)

RELEASE 2 - WEBSITE BUILD

* + Creating an account and logging into to DesignHub
  + Management overview, tools used to moderate and edit the website
  + Marketing and analytic tools for sponsorship, includes ads, press, VOD distributions
  + Reviewing the purchase and checkout process (with payment options) through DesignHub

**Project Scope**

This project has both functionality and aesthetic requirements. It is necessary to address some particular, pressing, needs:

1. Product listings

2. Product story pages (item overview) posted by the designers

3. Sign up/login for order accounts

4. Create payment processing and checkout capability for DesignHub

5. Dedicated space for sponsors’ ad or recommendations based on buyers’ order history

In order to achieve the above scope, Phase 1 of the project is limited to:

* + Functionality and technical requirements of the web portal. In subsequent phases, refining the functionality and cleaning up aesthetics will be part of the scope.

**Business Case**

DesignHub Web project promises to create an easy to access hub for designers looking to directly reach the consumer market. Currently many custom products are not listed through regular stores, such as Amazon, Etsy, or Walmart. Many custom products, such as wall art or paintings, are only shown at art galas and sold through auction houses. This causes these types of product to be locked into the high-end buying pool which only accounts for a portion of the general consumer market. Another critical issue with those types of venues is that most purchases are done online rather than in person. With the creation of the internet, buyers value convenience over finding the perfect item to buy. Even if said product is sitting at the nearest designer store, if it is not list online for the person to see, they will not make the effort to look for it at that store. This website allows designers to directly reach the consumer market by giving them the tools to list and control how their products are viewing in the age of online retail, rather than relying on other outlets such as Amazon to list and describe the item for sale. DesignHub provides the medium needed to bridge the gap between designers and consumers.

|  |  |
| --- | --- |
| **Application Name** | DesignHub |
| **Type of business model** | Advertising, Crowdsourcing & Brokerage |
| **Target audience of users** | General public (mid/high-end discretionary income)   1. Designer products – furniture, clothing, housing goods, art |
| **Value proposition** | Create a one-stop-shop for designers, allowing them to list their goods on one website for the general public to view and purchase from |
| **How the system is used** | Desktop Application  The application’s core function is to create a centralized website for designers of high-end/custom goods to list their products so that the wider public can view at their convenience rather than host them at closed events such as art galas and auction houses |
| **Revenue generation** | Partnering with designers/artist   1. Furniture 2. Artwork 3. Clothing   Advertisements from sponsors & partners  Brokerage - Charging a fee for processing the transaction |
| **Partners/Suppliers**  **(Stakeholders)** | Designers (mid-high end) for furniture, clothing, art (wall and custom pieces), home goods |
| **Expected Benefits** | Creating a common ground for designers to connect with the general purchasing market while retaining the convenience of online shopping |
| **Known Prototypes** | * [Wayfair](https://www.wayfair.com/gateway.php?refid=GX281225804394.Wayfair~e&position=1t1&network=g&pcrid=281225804394&device=c&targetid=aud-354999624671:kwd-5020179892&channel=GoogleBrand&campaignid=60375846&gclid=EAIaIQobChMIzLeCtoLU5AIVyODICh103AIeEAAYASAAEgJAzvD_BwE) * [Etsy](https://www.etsy.com/?utm_source=google&utm_medium=cpc&utm_term=etsy_e&utm_campaign=Search_US_Brand_Google_HP_General-Brand_Core_General_Exact&utm_ag=A1&utm_custom1=b47624b3-e501-4605-8179-cd621ef68f59&utm_content=go_227553629_16342445429_310396601160_kwd-1818581752_c_&gclid=EAIaIQobChMI8p3NooLU5AIVBJzVCh0Dawi6EAAYASAAEgLY_PD_BwE) * [Fine Art America](https://fineartamerica.com/) |

**Assumptions**

The assumptions supporting the Project are:

* + Staff is enough and experienced for all aspects of the Project to meet deadlines
  + Decent amount of funding is provided for the Project
  + There is stakeholder (Gallerists, Artists, and etc.) support for the Project
  + The hardware and software requirements to develop the Project are met, including Javascript, IDE, SQL Server, OS Systems, a repository solution to collaborate

**Constraints**

The aspects that need to be taken into consideration during the delivery of the project are:

* + Developing a top-notch website to be useable by the clients
  + Availability of funding
  + Time. Project team members have other class and work obligations during the delivery of this Project.
  + Sufficient amount of data to be supplied in development of program

**Risk Management Strategy**

The risk management part is an important part in the planning of any project. It is used as a plan to prepare of the event of any foreseen and unforeseen risks.

RMS Diagram



* Risk Identification is the process in which the group lists and identifies potential risks that may occur during the project.
* Risk Analysis is taking that list of risks and prioritizing them in order to determine which risks are more important and detrimental to the project than others.
* Risk Planning is creating and affecting an plan of attack if and when a risk occurs. This is probably the most important step due to how well the risk would be handled and what effect it might be on the project.
* Risk monitoring is a continuous operation in which the group keeps an eye on all moving parts of a project and sees when a risk is probable of happening in real time.

The main strategies that will be used during this project is as follows:

|  |  |
| --- | --- |
| Avoid Risk | A risk that might come up that is so serious that it is needed to be disbanded and avoid the cause altogether. |
| Control/Mitigate Risk | A risk whose activity is a required and important aspect of the project and must be able to be replaced in case of something going awry. |
| Accept Risk | Risk that the group deems that is probable and accepting the consequences (ex. Sunk costs) and is expected to happen throughout the life of the project and this must be budgeted for. |
| Transfer Risk | If risk cannot be mitigated, the group must be willing if and seek out a third party who will be able to handle the risk at a cost. |

This is a list of the possible risks that may come up over the course of the project:

|  |  |  |  |
| --- | --- | --- | --- |
| Risk | Risk Probability | Risk Impact | Mitigation method |
| Lost of staff, restructuring | Low | High | Other members of the team will be responsible to pick up extra work so deadlines will be met in a timely matter. |
| Quality wont be up to standards | Medium | Medium | Extra time outside of scheduled working hours must be spent in order to assure maximum quality of project. |
| Requirement of skills needed to complete project will be met | Low | High | Prior to project all group members were chosen based on specific needs to the project to ensure maximum productiveness. |
| Software and Hardware Corruption | Medium | High | Only way is to monitor the situation on a regular basis to ensure that if something where to go wrong, backups are in place. |
| Scheduling and Communication | Low | High | It is important to keep a constant flow of communication amongst group members as well as a regular scheduled time to commit to insert stabilization and regularity in the project. |

**Deliverables**

This section should include the main deliverables and outcomes the project is expected to achieve. It may be presented in the following format (see the project delivery schedule on Blackboard):

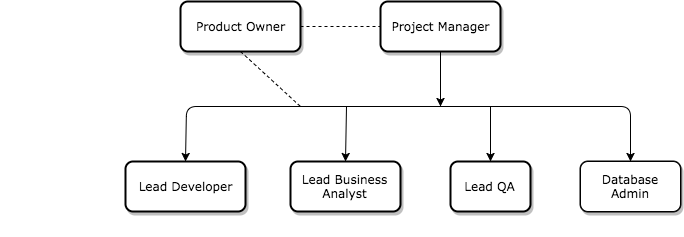
|  |  |  |
| --- | --- | --- |
| **No** | **Artifact Name** | **Responsible Party** |
| **1** | Project Plan | PM |
| **2** | PID document | PM |
| **3** | BRM Diagram | Product Owner |
| **4** | Context Diagram | Lead BA / PM |
| **5** | Architecture Diagrams (2) | Lead Dev / DBA |
| **6** | User Requirements | Product Owner |
| **7** | RCT (includes func. decomp., supplementary reqs) | Lead BA |
| **8** | Use-Case Diagram (UML) | Lead BA / DBA |
| **9** | Activity Diagram (UML) | Lead BA |
| **10** | Data-flow Diagram | Lead BA |
| **11** | Functional Requirements (user stories) | Lead BA /Product Owner |
| **12** | Class Diagram (UML) | Lead Dev / Dev |
| **13** | Sequence Diagram (UML) | Lead Dev / Dev |
| **14** | ER Diagrams (conceptual, logical) | DBA |
| **15** | Table Specs | DBA |
| **16** | Source code sample (part of Application Demo) | Lead Dev |
| **17** | Test Plan document | QA Tester |
| **18** | Application Demo | All |

**Stakeholders**

This section will include a list of all known stakeholders and their interests in the project. It may be presented in the following format:

|  |
| --- |
| Stakeholder |
| Auctioneers |
| Artists |
| Gallerists |
| Collectors |
| Curators |
| Art Dealers |
| Art Advisors |
| Art Critics |
| Museum institutions |

**Project Team**

Organizational Chart:

Team Members & Assigned Roles:

* Project Manager - Mateo Terselich
* Product Owner – Cesar Santana
* Lead Developer – Mingming Qiu
* Business Analyst – Matthew Tice
* DBA – Agil Madinali
* Developer - Zixin Yang
* QA Lead – Jessica Thomas

RACI Table:



**Project Plan**

DesignHub plans to follow Agile methodology, to allow for opportunities for stakeholder and team engagement during and after each Sprint. This collaboration with the team and stakeholders will help shape the application's usability. Agile also allows for change if something isn’t working, so DesignHub can consistently refine and re-prioritize items. See below the major milestone schedule:



|  |  |  |  |
| --- | --- | --- | --- |
| **Weekly Delivery Schedule** | | | |
|  |  |  |  |
| **Project Phase** | **Week** | **Deliverables** | **Owner Role** |
| Project Planning | 2 | Project Proposal | PM |
|  | 3 | PID document; selected development process | PM |
|  | 4 | Project Plan, RACI, refined PID | PM |
| Requirements Analysis | 5 | BRM Diagram | Product Owner |
|  | 5 | Context Diagram | Lead BA |
|  | 5 | Requirements Types | Lead BA |
|  | 6 | User Requirements | Product Owner |
|  | 6 | RCT (includes func. decomp., supplementary reqs) | Lead BA |
|  | 7 | UML analysis diagrams (use case, activity diagrams) | Lead BA |
|  | 7 | Data-flow Diagram | Lead BA |
|  | 7 | Functional Requirements (use cases or user stories) | Lead BA |
| High-level Design | 9 | ER Diagrams (conceptual, logical) | DBA |
|  | 9 | Database Table Specs | DBA |
|  | 10 | Architecture Diagrams (2) | Lead Dev/DBA |
|  | 11 | Class Diagram (UML) | Lead Dev |
|  | 11 | Sequence Diagram (UML) | Lead Dev |
| Implementation | 8,9,10,11 | Source code sample | Lead Dev |
| Testing | 12,13 | Test documents (test plan, test design, test cases) | Lead QA |

**Milestones**

MS1: Initial Project Plan (9/20/2019)

**Project Controls**

* + Meetings with the Project Manager will be held regularly to monitor progress and manage arising issues. There will be one Friday meeting where the entire group is expected to be present. One or two other meetings will be conducted throughout the week pending on the schedule. These meetings can be remote or in-person.
  + The Project Manager will produce regular reports for Professor Chernak and Stakeholders.
  + Communication will be done via Email and WhatsApp within the project team. Email exchange will be the primary means of communicating with stakeholders
  + Google Drive will be used as a repository for official documentation and will contain all project documentation.
  + All source code will be uploaded to PROJECT REPOSITORY TBD

**Communication Plan**

The communication plan for the Project is as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| **Stakeholder** | **Frequency** | **Type** | **Purpose** |
| **Professor** | At key stages - meetings and deliverable drafts | Email | To approve Project implementation and direction. Advise if there are any potential issues. |
| **Project Team** | Daily | Email, Skype for Business, personal meetings, whatsapp, zoom | Maintain progress and ensure that the team is meeting weekly requirements. |
| **End Users** | Potentially during the testing phase and after release. | Email, online testing sessions, attend NYC events | Feedback! |