Transition Plan (TP)

Citizens Hive

Team 4

Kranthi Nuthalapati  Project Manager
Arundhati Kurup  Operational Concept Engineer
Akansha Das  Feasibility Analyst
Akankshya Patra  System Architect / Programmer
Jijnasa Nayak  Requirements Engineer
Mugdha Govilkar  Prototyper
Pushpak Bhattacharyya  Life Cycle Planner
Briana Cordova-Moore  Client, Administrator & Maintainer

November 24, 2020
Version History

<table>
<thead>
<tr>
<th>Date</th>
<th>Author</th>
<th>Version</th>
<th>Changes made</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>02/08/06</td>
<td>AD</td>
<td>1.0</td>
<td>● Transition Strategy - Transition objectives and transition process strategy.</td>
<td>● Initial draft with all the details put in</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● Stakeholder Roles, Responsibilities and Schedule</td>
<td></td>
</tr>
<tr>
<td>02/08/06</td>
<td>MG</td>
<td>1.2</td>
<td>● Preparation for Transition</td>
<td>● Initial draft with all the details put in</td>
</tr>
<tr>
<td>01/02/09</td>
<td>AD, MG</td>
<td>1.3</td>
<td>● Preparation for Transition</td>
<td>● Modifications with details added as per team discussion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● Stakeholder Roles, Responsibilities and Schedule</td>
<td></td>
</tr>
<tr>
<td>06/21/12</td>
<td>MG</td>
<td>1.4</td>
<td>● Transition objectives and transition process strategy.</td>
<td>● Modifications with details added as per team discussion</td>
</tr>
</tbody>
</table>
Table of Contents

TRANSITION PLAN (TP)  I
VERSION HISTORY  II
TABLE OF CONTENTS  III
TABLE OF TABLES  IV
TABLE OF FIGURES  V

1. Transition Strategy  6
   1.1 Transition Objectives  6
   1.2 Transition Process Strategy  7
2. Preparing for Transition  9
   2.1 Hardware Preparation  9
   2.2 Software Preparation  9
   2.3 Site Preparation  10
3. Stakeholder Roles, Responsibilities and Schedule  10
Table of Tables

Table 1: Training Schedule

Table 1: Transition Schedule
Table of Figures

No table of figures entries found.
1. Transition Strategy

The transition strategy that we are going to adopt for this project is as follows

Preparing comprehensive and easy-to-understand user manuals. These will guide the user about the flow of the project and help the user gain a deeper understanding of the functionality.

Thoroughly documenting the source code and verifying that the project we are handing over is error free.

Handing over the project archive, including the source code and other assets to the client for further maintenance.

Transferring the API credentials for Twilio (Messaging) and Stripe (Online payments) to the client. For the development purposes, we used access keys for these APIs which belonged to developer owned accounts. These have to be changed to the keys belonging to the client owned accounts for Twilio and Stripe to be used in the production environment.

Organizing effective training sessions for the client. This will include a code walkthrough, guidance on setting up the local environment to run the project locally, to be able to connect to Amazon LightSail instance and to be able to transfer code files to this instance after making any changes to the files.

1.1 Transition Objectives

Our objective while handing this project over to the client is to achieve client approval and satisfaction. This will be a pure turnkey transition with no support from the developer, with the understanding that the client will maintain the application on their own. This will thus include a handover of the complete web application to the client with all the core capabilities viz login/register, profile editing, messaging, forum, search and filter and payments, implemented and tested. We will also hand over the documentation, manuals, assets and the database credentials to the client.

- **Extent of capability transitioned: Intermediate**

  - Our client wanted us to create an MVP for her idea, so we focused more on making all the core functionalities work instead of making each functionality perfect.
  - The current status of the functionality of the Payments feature isn’t user to user. It requires human intervention to complete, once the senior has paid money to the caregiver. For the caregiver to redeem the money they receive from seniors - they need to initiate a request to the admin of the website to approve this request and then the admin will send the money to the caregiver in a payment mode of their choice.
  - The website has not been tested with a big number of concurrent users.

- **Number and nature of transition sites: one vs. many; homogeneous vs. heterogeneous.**

  - One site - Amazon Lightsail Django instance

- **Degree of post-transition developer support: none (pure turnkey), full (facilities management by developer), intermediate.**
- None (Pure Turnkey)
- The client will maintain the application on their own after the handover of the project

● Degree of validation of operational satisfaction of stakeholder objectives.
  - High degree of validation:
    1. Client (a major stakeholder) - has used the website we’ve developed and was satisfied with the core features we implemented and how we implemented them. We worked on the feedback we received from the client after the client used the system first hand in a Core Capability Drivethrough session.
    2. Developers (the team) - We have tested the website to ensure that all the core features work as described by the client in her requirements. Each team member brainstormed for edge cases for the core capabilities of the website and all of them put together have been thoroughly tested, verified against expected output and fixed wherever required.

● Nature of product transition: shrink-wrapped product; new system; improvement in existing operation.
  - New system. This website is built from ground-up using python-django as the backend framework along with HTML, CSS and JavaScript. This also included setting up an Amazon LightSail Django instance, Amazon LightSail MySQL Database instance, Hosting the website built on the Django instance and connecting it to the MySQL instance for data storage.

● Relation to support objectives, e.g., data collection to support evolution planning.

The tasks in our to-do list for transition are:

- Hand over a complete web application to the client with all the core capabilities implemented and tested. Hand over a complete web application to the client with all the core capabilities implemented and tested.
- Transfer the credentials from developer owned accounts to client owned accounts for Twilio and Stripe.
- Hand over documentation, manuals, assets and database credentials to the client.
- Link deployed the web application on Amazon Lightsail to the DNS server.
- Achieve Client Approval & Satisfaction.

1.2 Transition Process Strategy

We have a pure turnkey transition, with no support from the developer. The client would maintain the application on her own.

Transition Strategies:
- Prepare comprehensive, easy-to-read user manuals.
- Source code will be thoroughly documented and verified.
- The project archive, including source code and other assets will be handed over to the client for further maintenance.
- Transfer API credentials (Stripe, Twilio) to the client.
- Organize effective training sessions for the client.

Training Schedule:

Table 1: Training Schedule

<table>
<thead>
<tr>
<th>Training Task</th>
<th>Deadline Date</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly costs associated with the website</td>
<td>Nov 28, 2020</td>
<td>In-Progress</td>
</tr>
<tr>
<td>How to access the application on Lightsail</td>
<td>Nov 28, 2020</td>
<td>In-Progress</td>
</tr>
<tr>
<td>How the client can setup the code on her system and run the website locally</td>
<td>Nov 28, 2020</td>
<td>In-Progress</td>
</tr>
<tr>
<td>How to access the database as an admin on Lightsail</td>
<td>Nov 28, 2020</td>
<td>In-Progress</td>
</tr>
<tr>
<td>How to push code to the Lightsail instance</td>
<td>Nov 28, 2020</td>
<td>In-Progress</td>
</tr>
</tbody>
</table>

Role Phasing of transition of multiple increments to multiple sites:

- None. We only have a single site deployment.

Role of alpha-testing, beta-testing and evaluation

Alpha Testing:
Alpha testing is the process of the testing team verifying the application in the presence of end users within the organizational environment.
Manual Black box testing was performed throughout the development process.

The core capabilities that we tested were:
- Registration and Login
- Profile Creation
- Profile Editing
- Search and Filter
- Messaging
- Reviews and Ratings
- Payments
- Forum

How we went about testing each core capability was by following the various stages of the manual testing, like this:
- Test Plan Creation
- Test Case Creation
- Test Case Execution  
- Defect Logging  
- Defect Fixing and Re-Verifying

For each test case, we documented its procedure, expected result, actual result and its status (i.e., pass if the expected result matched the actual result and fail if not).

**Beta Testing:**

Beta Testing is done by the end user in the real environment (released to a limited number of end-users).

Here, beta testing wasn’t possible since we are yet to finish the development. But we were able to successfully have our client, Briana, test the developed website. During the Core Capability Drivethrough session we had with our client, she used the website and tested whether all the pages and core capabilities of the website were working properly. This hands-on usage opportunity helped our client understand whether the developers were on the right track. This also suggested changes she wanted us to make, and reported the errors she found. This alpha-testing activity helped us get a better understanding of what was to be fixed, changed and improved.

## 2. Preparing for Transition

Preparing for transition is a significant non trivial task critical to ultimate successful operation of the system. For Citizen’s Hive, our Transition Plan is focused around the software preparation as no hardware preparations were involved in the development of this project. This preparation includes packaging the project code, user manual and software licensing.

### 2.1 Hardware Preparation

The final deliverable from the developer’s end is a functional website and thus no hardware components are involved in this project.

### 2.2 Software Preparation

- Packaging of the django application including all the code file (Python, HTML, CSS, JavaScript and other internal code files) and transferring them to the user. The packages required to be installed for messaging and payments viz Twilio and Stripe have been installed after consulting the client and having her consent for the same.

- Since this project is a new project, built from ground-up, there is no legacy code incompatibility risk arising.
- Currently we are using Twilio and Stripe APIs for messaging and payments functionality respectively, in our Django project. These APIs require a key to be used from the account created for these services. These keys are currently the ones that belong to developer owned accounts and we have to change it to keys belonging to client owned accounts for Twilio and Stripe, to be used in the production environment.

- Transferring the connection details of the Amazon LightSail Django instance and the Amazon LightSail MySQL instance to the client.

### 2.3 Site Preparation

- Set up the local environment of a PC by installing all the necessary python packages to run the project locally.

- These dependencies are all mentioned in the requirements.txt file of the project.

- Set up an FTP client like FileZilla to be able to connect to Amazon LightSail Django instance to push code files to the server.

### 3. Stakeholder Roles, Responsibilities and Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Role</th>
<th>Responsibility</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/02/09</td>
<td>Developers</td>
<td>- Development and deployment of final website</td>
<td>Remote</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Creation of user and technical manuals</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Knowledge transfer to the client</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Testing of the website before handover to the client.</td>
<td></td>
</tr>
<tr>
<td>11/20/2020</td>
<td>Operational Testers</td>
<td>The developers are also the testers. Verify the <strong>operational</strong> readiness (pre-release) of the website based on the requirements.</td>
<td>Remote</td>
</tr>
<tr>
<td></td>
<td>Maintainer and Admin</td>
<td>Our client is both, the maintainer and the admin.</td>
<td>Remote</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Approval of payment request received from a caregiver and handle the transfer of funds</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Monitoring the website for errors</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Ensure the availability of the website</td>
<td></td>
</tr>
</tbody>
</table>