

# CBILITY Technologies Co., Ltd.

## Architectural Design

### Component Table

Component	Responsibility	Interacts With
Platform's User Interface	<ul style="list-style-type: none"><li>- Render to the user's screen the interface of the platform</li><li>- Allows users to interact with the system</li><li>- Send events to the Platform's Business Logic as needed</li></ul>	<p>Requires:</p> <ul style="list-style-type: none"><li>- Platform's Business Logic</li></ul>
Platform's Business Logic	<ul style="list-style-type: none"><li>- Receive events (such as user interactions) from the Platform's User Interface</li><li>- Perform computation based on the received events or other internally occurring events, utilizing other components or services as needed</li></ul>	<p>Provides:</p> <ul style="list-style-type: none"><li>- Platform's User Interface</li></ul> <p>Requires:</p> <ul style="list-style-type: none"><li>- Authentication Service</li><li>- Database Service</li></ul>
Authentication Service	<ul style="list-style-type: none"><li>- Allows interacting components to sign up, log in, and sign out.</li><li>- Accepts credentials (such as usernames and passwords), perform necessary encryptions, and interact with SQLite Database File</li></ul>	<p>Provides:</p> <ul style="list-style-type: none"><li>- Platform's Business Logic</li></ul> <p>Requires:</p> <ul style="list-style-type: none"><li>- SQLite Database File</li></ul>
Database Service	<ul style="list-style-type: none"><li>- Connect and interact directly with SQLite Database File.</li><li>- Provide database-related functionality to other components.</li><li>- Act as a middleman between the SQLite Database File and other components.</li></ul>	<p>Provides:</p> <ul style="list-style-type: none"><li>- Authentication Service</li><li>- Platform's Business Logic</li></ul> <p>Requires:</p> <ul style="list-style-type: none"><li>- SQLite Database File</li></ul>

SQLite Database File	<ul style="list-style-type: none"> <li>- Local database for storing animal data, adoption data, and authentication data (encrypted).</li> </ul>	Provides: <ul style="list-style-type: none"> <li>- Database Service</li> </ul>
File Service	<ul style="list-style-type: none"> <li>- Provides file selection and uploading capability to the platform</li> <li>- Store and retrieve files from File Storage</li> <li>- Act as a middleman between File Storage and other components that need to utilise it</li> </ul>	Provides: <ul style="list-style-type: none"> <li>- Platform's Business Logic</li> </ul> Requires: <ul style="list-style-type: none"> <li>- File Storage</li> </ul>
File Storage	<ul style="list-style-type: none"> <li>- Local on-disk file storage</li> </ul>	Provides: <ul style="list-style-type: none"> <li>- File Service</li> </ul>

# Component Diagram

