

CBILITY Technologies Co., Ltd.

Architectural Design

Component Table

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

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

Component Diagram

