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| The Institute of Applied Poultry Technology |
| Flock Information Database |

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**Abstract:**

The Institute of Applied Poultry Technology (IAPT) is a non-profit entity that was established to innovate cost saving poultry health technologies that provides a full range of laboratory services. They aim to maximize the health, welfare and productivity of their livestock and as well as further improve food quality and safety. Some responsibilities of the IAPT employees is to conduct research to study and create new vaccines to combat new or existing diseases. Enterprises, who hire poultry producers, must submit physical forms known as flock sheets (please see Figure 1), which contain valuable data that allows IAPT employees to retrieve the data for their research. The forms that are submitted are also sent to the government regulatory board. These forms are examined and then stored in physical files by the government.

**-----------------------(insert form here) -----------------------**

**Introduction:**

The current format of these forms is very inefficient, as a result of the required manual labour of searching, organizing, or retrieving data. A solution to this inefficiency is to produce a digital format of filling and submitting the form. This solution would be offered to the poultry producer without a cost, but ultimately allows the employees to retrieve any data that was submitted for more efficient research. A database will be implemented to store the data from the submitted forms.A website application will be an interface to allow producers to submit the forms. A producer is expected to be able to access a website and fill in the form and also be able to submit it to be stored in the database. An IAPT employee, would be expected to be able to query the database and retrieve the results. A government employee would be expected to view the data that was submitted and will store the information in their own preferred means.

**Project Design:**

There are three users that will use this system.

**Enterprise/Producer:** An enterprise is a company that hires producer(s) of agriculture and producers can also be an enterprise. It is believed that a producer will be able to submit information related to their flock of poultry. The submitted information includes but is not limited to the barn number, category of poultry, and any medications that have been administered to their flock. A producer is limited to providing such information by accessing the website to submit a form. Some sample transactions for a producer includes registering and logging into the website, and as well as submitting a form. These transactions include inserting information into the database, such as registering the user and the submission of their form, and as well as querying for the producer to verify a valid user upon login.

**IAPT Employee:** An IAPT employee can range from veterinarians to scientists, but suppose that these employees are strictly researchers or scientists and disregard any other position. These employees will have full access to querying the database for the information that has been submitted by the producers. An employee is limited to querying the database for specific information and should not be able to create, insert, alter, or remove any data. These employees can also access the website to query for data. Some sample transactions for an employee includes registering and logging into the website, and as well as retrieving information from a database. These transactions include querying and viewing the data of specific information, such as viewing what type of medicine that has been administered to the flock, who submitted the form, and also when the flock may have been processed. These transactions include inserting information into the database as a result of registering the user and as well as querying for the employee to verify a valid user upon login and the respective data that the employee would like to retrieve.

**Government Employee:** A government employee can also range from many different fields, but also suppose that these employees strictly handle agricultural related material. These employees will only have access to viewing the form that was submitted by a producer. They will be restricted from creating, inserting, altering, or removing any data. An employee will be able to generally view the data that has been submitted within a range of dates and will not be able to query the database for specific information that the IAPT employees are able to do. These employees can also access the website to query for data. Some sample transactions for an employee includes registering and logging into the website, and as well as retrieving information from a database. These transactions include querying and viewing the data of general information within a range of dates, such as **(insert-what-information-the-government-can-query-here)** These transactions include inserting information into the database as a result of registering the user and as well as querying for the employee to verify a valid user upon login and the respective data that the employee would like to retrieve.