DOG SHOW SOFTWARE

1. OVERVIEW

The Williamsport Area Kennel Club is seeking contractors to implement software for tracking and scoring dog shows, which *should* execute on at least one of the following platforms:

- Cell phone device
- Tablet or similar portable hardware
- Laptop or desktop

The software *will* be used to maintain records of scores and participants of the Annual West Branch Dog Show (WBDS) to be held each fall, and *should* operate in a user-friendly manner. The software *will* be operated by an authorized and authenticated user, henceforth referred to as the *Registrar*.

A. Background Information:

The show draws participants from Lycoming, Centre, and Jersey Shore counties and is not restricted to pedigreed dogs. Mixes are welcome, and participation of such breeds is encouraged. The participating dog may be spayed or neutered, since this contest is not about breeding or purebred dogs. The objective of the show is to celebrate and acknowledge the companionship between the dog and the family it is a member of.

Each contestant may participate in at least one of the classes mentioned below:

1. Obedience – gaiting, free stack, back up and stay
2. Socialization – temperament around other dogs, and non-aggressive toward strangers
3. Grooming – coat, teeth, general hygiene and appearance
4. Playing Fetch -retrieval skills of a dispatched frisbee or tennis ball

The contestants will be scored by a panel of five judges, drawn from the local community. The judges score each contestant separately for each category, on a score of zero to ten. Only the median score for each contestant in each category is considered to avoid bias from outlier scores. Each dog appearing in a category is scored and awarded for that particular category. Contestants taking part in all four categories are eligible for the grand prize, the *Balto* award. The dog achieving the highest overall aggregate score across all four categories will be awarded a 30 lbs. bag of dog food of the contestant's choice from the pet store sponsoring the day's events. The bronze

statue of *Balto*, the world renowned and respected Siberian husky and sled dog located at the intersection of Market Street and Little League Boulevard will bear a scarf indicating the name and family of the winning contestant for the entire year.

B. Platform Requirements

   i. The software *shall* execute on a platform that supports implementation of the various requirements mentioned in this document

   ii. The software *may* use an external server to implement the persistent storage requirement specified elsewhere in this document (1-C)

C. User Interface

   i. The input for this preliminary implementation *should* be a simple screen or keyboard entry device

   ii. The input *shall* accept Registrar interaction through a touch screen or a keyboard mouse combination

   iii. The output *shall* be to a display device such as a monitor or a screen

   iv. The output *shall* be formatted in a manner that is easily readable at a distance

D. Information Storage

   i. The software product *shall* store scores in a persistent manner, remembering scores once recorded

   ii. The product *shall* store information in a manner that is tamper proof

   iii. The product *shall* store information in a staged manner, with a preliminary stage at the end of each set being modifiable (**contestable** stage), which once committed and made persistent (**committed** stage) *shall* be tamper proof and immutable

E. Scoring Capability

   i. The software *shall* implement scoring for show participants indicating the names of the family as well as the participating dog

   ii. The software *shall* store a picture of the dog along with the county registration number

   iii. The software *shall* store the breed, age, identifiable color and markings of the dog

   iv. The software *shall* identify the scores of all participants for their respective categories, clearly indicating the winner in that category

   v. Contestants eligible for the coveted Balto award *shall* be listed on the screen

   vi. A drill-down screen showing all categories *shall* be presented to the user

2. THE FRAMEWORK

The start screen *should* provide a decorative splash page; with selections to view the results of previous shows, an option to register participants for a new show, and an option to enter scores for an ongoing show. The interaction with the software *should* be minimal and *should* be easy to deploy and learn.

A. Records View

    i.   The records view option *shall* provide the user with a listing of previous contests indicating the contestants and dates, with a drill-down capability to inspect categories, contestant information, and scores.

B. Registration View

    i.   The registration option *shall* provide the user with a means to register contestants in a user-friendly manner. Data entry *shall* be supported with minimal keyboard interaction or gestures, depending on the mode adopted by the user interface

    ii.   The registrar *shall* upload a picture of the participating dog

    iii.   The registrar *shall* identify the categories the dog participates in

C. Contest View

    i.   Each score *shall* be in a Contestable state while the show is in progress

    ii.   Once the show is complete, the final score *shall* be Committed by the registrar

    iii.   The committed score *shall* be immutable and shall be stored in a persistent manner that is readable

    iv.   The information *shall* be stored either locally or remotely

3. REQUEST FOR PROPOSAL

Developers interested in this project *should* treat this document as a request for proposal (RFP) and *should* submit a high-level design document (HLD) detailing class diagrams and activity diagrams by midnight February 24th, 2023.

TERMINOLOGY USED IN THIS SRS

- **Shall – Requirement**: Shall is used to indicate a requirement that is contractually binding, meaning it must be implemented, and its implementation verified
- **Facts or Declaration of Purpose:** *Will* is used to indicate a statement of fact. Will statements are not subject to verification
- **Should – Goals, non-mandatory provisions.** Should is used to indicate a goal which must be addressed by the design team but is not formally verified since this is a broad requirement
- **May** – "May" and its negative "*may not*" is used to indicate a non-mandatory suggestion or permission
- **Must** –"*Must*" and its negative "*must not*" shall never be used, since one of its meanings is synonymous with *ought* and *shall* or *should*