Salesforce Certified Technical Architect

Mock Scenario

Animals Needing New Homes

Created by Andrew Hart. Certified Technical Architect.

VP Services, OwnBackup.

Available via my website to those on their CTA journey.



andrew.hart@btinternet.com

http://cta202.com

https://www.linkedin.com/in/andrewjameshart/

Scenario

Instructions

For the hypothetical scenario described below, the candidate will have 90 minutes to read, evaluate, and document a high-level architectural solution. The solution should:

- Address where the Force.com platform will and will not be used.
- Describe how the Force.com platform portion of the solution will interact with the other systems needed to complete the solution
- Identify any potential key risk areas.

The candidate should target the presentation to a technical IT architecture audience. In cases where requirements are not explicitly stated for the scenario, the candidate should use their best judgement and make appropriate assumptions based on the information provided. The candidate should indicate to the review board any assumptions that were made when designing the proposed solution. The candidate will not have an opportunity to ask clarifying questions related to the hypothetical scenario.

The candidate will be evaluated on their ability to assess the scenario requirements, design a solution, communicate the proposed architecture, and justify the design decisions. The candidate will not be evaluated on the tools used for the presentation.

Project Overview

Animals Needing New Homes (ANNH) is a charitable organisation that rescues animals and gives them temporary accommodation whilst searching for new homes for them.

They look after dogs, cats, chickens, and other - generally domestic - species.

Although there are some salaried staff, most help is from volunteers.

Their head office, and main farm, is just outside Birmingham in the UK. They have similar smallholdings in 7 European locations in Spain, Greece, Italy and Romania. Each location has roughly 15 workers.

ANNH is funded from three separate revenue streams.

- The first is donations from the public, and this information needs to be recorded for auditing purposes
- The second is corporate donations, mostly of food and equipments that is used for animal care these must also be tracked for auditing
- And finally, fees from those who adopt animals. This varies based on the animal type and costs associated with the rehoming.

Current Systems

- 1. Most information is unstructured and captured in emails and use of Outlook. ANNH are looking to centralise this.
- 2. There is currently no mobile/handheld strategy at all. ANNH would like to create efficiencies whilst allowing a 'bring your own device' policy for employees and volunteers.

Future Landscape

- 1. The veterinary surgery that ANNH uses has introduced a new system for recording vaccination, surgery and other 'health record' information and made a REST API available for third parties to integrate. ANNH would like to make use of this to remove manual processes and note-taking which are subject to human error.
- 2. The European Union has a 'pet passport' scheme, with a SOAP API available. This needs to be completed when a pet needs to cross country borders and has previously been completed using a webform. ANNH want to improve this process to reduce/remove mistakes in this important legal process
- 3. ANNH want to integrate with their accounting platform (Xero)

Users

- 1. The 30 office staff (approximately 4 at each location) track animals, donors, adopters relevant to their location
- 2. Each office manager has complete visibility right across the company
- 3. Volunteers need to be able to update feeding records, upload photos, and general information entry for animals at their locations only
- 4. The public should be able to view animals that are available for rehoming

Business Process Requirements

1 - New Animals

- A. Animals make it to ANNH facilities in a variety of ways. But once they have arrived, a full check is done of the animal and all known details are recorded (species, colour, breed, any obvious physical injuries) as well as the name, if known. When a name isn't known, the receiving carer will give one.
- B. Sometimes the name of an animal becomes clear later on, once additional checks have been made. ANNH would like to track both names (official, and given at facility)
- C. Rarely, but sometimes, an animal will be registered with a central body and have a third 'pedigree' name. This also needs to be recorded when it's known.
- D. If an animal appears healthy an appointment will be made for the vets' next scheduled visit (generally weekly at each facility).
- E. If an animal needs urgent attention, then a vet is called immediately.
- F. A vets' first visit includes a full check of the animal, as well as scanning to see if they are electronically tagged. If so, the vet will provide the registration details of the tagging to ANNH with the health check report.
- G. If an animal requires surgery, the vet will carry this out.
- H. Vets are paid on a monthly basis, and although they provided discounted rates for scheduled activity, there are costs to surgery and out -of-hours calls that ANNH would like to be able to track and reconcile against the invoices.
- I. Once an animal is healthy, they are listed on the website for rehoming.

2 - Adoption Services

- A. Anyone interested in adopting an animal can register on the website. Key details will be asked about the individuals (such as children, working arrangements and experience with pets) and their home (does it have gardens, is it on a main road, etc.)
- B. There will be a follow up call to go through some more details and have a 'first check' that the potential adopters are suitable.
- C. A 'home visit' will be carried out. This involves checking the home, gardens, etc. Pictures will be taken and these need to be stored against the adopter record.
- D. If there are things that need to be corrected (a fence that needs to be higher, for example), these will be made known and proof will be required to be provided before adoption can move forward.
- E. If they are in the same locality, adopters are required to visit an animal before it can be re-homed. The number of visits varies per individual animal.
- F. Once approval is given, payment needs to be made. There is a flat fee (which varies per country) and then any additional costs travel, vaccinations, etc. Adopters can also add an additional donation if they wish.

- G. ANNH is a registered charity, so can make use of tax-reclamation in countries that have this scheme (such as Gift Aid in the UK). Adopters and donators need to 'opt in' to this and clear audit is required. The actual reclamation is carried out via Xero.
- H. Payments are made through local EPOS services in each country, though all finances are tracked through Xero.
- I. Only once payment has complete, approval for rehoming can take place and the logistics can be organised
- J. Adopters can choose to receive notifications at any time, to be kept up to date with the process.

3 - Donations

- A. ANNH want to track every donor, and include them in future marketing communications.
- B. ANNH will need to comply with EU level 'opt out' and other relevant legislation.
- C. There is a small team that handles both private and corporate donations.
- D. Corporate donors generally provide food, materials and equipment. Companies that do have their logo on the website for at least 6 months. ANNH would like to automate this process.

Data Migration Requirements

Use of Outlook will be discontinued. ANNH would like all information moved to Salesforce and are aware it will require considerable consolidation and cleaning.

Other

Emails will be sent solely from Salesforce, and local language will be used.

Local currencies must be used, though central reporting needs to be in Euros.