Professional Practice 2

Project outputs

u7380405 Zonghai Wang

u7377827 Yujing Wu

u7348129 Yiyang Hou

u7373018 Yu Wang

WorkShop2 Group 7

Professional Practice 2

Software Engineer (Yu Wang):

Prototype Design

- (1) Structural layout of functions
- (2) Design of each sub-page

Testers & Data Analysts (Zonghai Wang):

Test website and application

- (1) As a user to simulate the use of the site's plot
- (2) Find possible bugs when using the site

Backend Programmer (Yiyang Hou):

- (1) Deploying Web Servers
- (2) Deployment of database and access to website
- (3) Set up administrator backend

Front-end Programmer (Yujing Wu)

- (1) Designing web pages
- (2) Enables websites to jump to each other
- (3) Designing the colour scheme and layout structure of web pages

Revision History

Date	Version	Description	Author		
05/15/2022	1.0	First revision	Yujing Wu		
Page front end is comp	oleted.				
05/23/2022	2.0 Second revision Zonghai Wa				
Troubleshooting basic	usage bugs				
05/30/2022	3.0	Third revision	Yu Wang		
Mobile version finishe	d				
06/01/2022	06/01/2022 4.0 Fourth revision Yiyang Hou				
Deployed web servers	•				

Team Charter

1. Introduction

1.1 Purpose

We aim to create a relatively new platform on which volunteers can share the wildlife they find. The backend of the site can be updated in real time with uploaded images and also exists for the admin backend.

1.2 Scope

Animal protection volunteers around the world

1.3 Definitions, Acronyms, and Abbreviations

Web Site Name:

Citizen Science Community

Acronyms:

Citizen Science Community (CSC)

2. Overview and Rationale

- 1.Every team member should show up in the meeting at the predetermined time point and being late for 15 minutes would be considered as an absence. Once a member wants to drop the meeting, it should inform the whole team 24 hours in advance, and the meeting can be rescheduled. If one member has an emergency, the absence can be excused.
- 2. When facing a disagreement or a conflict between two teammates which cannot be solved privately and has already influence the process of the team project, we can use voting to solve the problem. When it comes to a draw, like 2 votes versus 2 votes, the team leader has the right to make the final decision.
- 3. When having a meeting, doing works irrelevant with the project and an intended unreasonable interruption are not allowed.
- 4. The part finished or on work authored by one team member is not supposed to be modified by another member without permission.
- 5. The distributed work should be finished on time.

Team Name

Premium Membership Restaurant (PMR)

u7380405 Zonghai Wang u7377827 Yujing Wu u7348129 Yiyang Hou u7373018 Yu Wang

Team Member Sign Off:

I have participated in the development or review of this charter and agree to it.

Team Member: _	Yujing Wu
Team Member:	Yu Wang
Team Member:	Yiyang Hou
Team Member:	Zonghai Wang
Seminar tutor: _	Dr Ehsan Nabavi

Date: 2022/06/01

Data analysis

Questionnaire survey

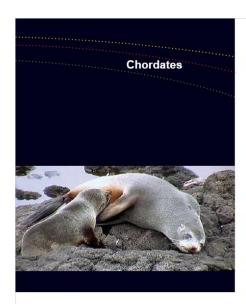
	1. What type of pet do you care for?
	Check all that apply:
	Dog
	Cat
	Fish
	Rabbit
	Snake
	I don't own any pets
	Other (please specify)
Sel	lect all that apply: If a dangerous/aggressive pet bites any person once, they must be euthanized
	If a dangerous/aggressive pet bites any person, pet must be evaluated based on circumstance, severity of bite and history of the dog
	Fines and education to owners when these animals are found loose
	Prohibit guard dogs
	Prohibit specific breeds of dogs
	Owners to be held responsible for their pet's actions
	Other (please specify)

3. What would you agree with regarding pet ownership, licensing & fines? <i>Click all that apply:</i>
Reduced costs for sterilized pets (sterilization = responsible behavior)
Owners of dangerous/aggressive pets must have a special license to care for these pets
High fees to reclaim loose pets
Immediate fines for contravening the Animal Protection Law
Loss of right to own pets for continuously contravening the Animal Protection Law
Other (please specify)
4. Do you agree or disagree with mandatory licensing & identification for all pets in Kahnawà:ke on an annual basis (pay an annual fee)? Strongly agree Somewhat agree UNDECIDED Somewhat disagree Strongly Disagree
5. Do you agree that all Kahnawà:ke pets should be vaccinated according to generally accepted Veterinarian standards to ensure safety & protection? Output Strongly agree UNDECIDED Somewhat disagree Strongly Disagree

6. If all dogs when in public are required to be on a leash, do you agree that there should be a fenced in area or place that they can have the opportunity to exercise and be off leash (i.e. Dog Park)?
Strongly agree
○ Somewhat agree
UNDECIDED
○ Somewhat disagree
○ Strongly Disagree
7. Do you agree that owners who neglect/ improperly care for their pets should be ordered by a court not to be able to own pets or have their license removed? (If icenses become mandatory)
Strongly agree
Somewhat agree
UNDECIDED
Somewhat disagree
Strongly Disagree
8. What methods would you agree with to deal with nuisance wildlife? (i.e. skunk, raccoons, etc) Select all aspects you agree with
Education on Preventative measures
Trapping and relocating within Kahnawake
Trapping and relocating to the North Wall (opposite side of seaway)
Trapping and relocating to a protected area of the territory (pending agreements)
Trapping and relocating to Tioweroton (cost covered by homeowner)
Euthanization
Nothing
Other (please specify)

9. For future consideration, do you think there should be regulations in regards t
livestock (cows, pigs, chickens, horses, etc) ?
Strongly agree
○ Somewhat agree
UNDECIDED
Somewhat disagree
Strongly Disagree
10. What would you consider a nuisance pet?
Select all that apply:
Defecating on property other than its owner
Repetitive barking/ howling
Repetitive roaming at large
Damage to property
Ripping up garbage bags left on roadside
Other (please specify)

Data from the literature



Mammalia (mammals)



Mammals are a quite well known group, however estimates for the numbers of described species still vary considerably, ranging from 4,300 in *Biodiversity: the UK Action Plan* (Anon. 1994), through 4,630 (Groombridge and Jenkins 2002), 5,418 (IUCN 2004), 5,419 (Wilson and Reeder 2005) to 5,487 (IUCN 2009a). For the purposes of this report, I have accepted the figure of 5,487 which accords well with the most recent figures from The IUCN Red List of Threatened Species although Hilton-Taylor (pers. comm.*?) suggests that there are several additional recently described species. Although I can find no estimate of the total estimated

number of species of mammals, based on the recent rate of description of new species, I estimate that it would be a little over 5,500 species.

Australian mammal species are quite well known and thus the number of described species is relatively stable at 386 in 48 familes and 150 genera (ABRS 2009a) although this number has increased by eight since the last edition. There are also 246 accepted subspecies. Estimates for the number of species yet to be described in Australia is <1%, however, as noted previously, molecular studies may lead to some further splitting. Mammal species are well known, and endemism in Australia was given as 83% in the previous report (calculated from Walton 1988). The percent endemism has been revised to 87% following recalculations based on new species described since 1988.

There are 78 listed threatened species in Australia along with 42 subspecies, forms or populations including four undescribed subspecies (DEWHA 2008a). Of these, 20 species and seven subspecies are listed as Extinct in the Wild, two species and two subspecies as Critically Endangered, 25 species, six subspecies, one form and one population as Endangered and 31 species, 19 subspecies, and six races, forms or populations as Vulnerable.

World Descr./ Accepted min.	World Descr./ Accepted max.	World Descr./ Accepted	World Estimated	Australia Descr./ Accepted	Australia Percent.	Australia Estimated	Australia Endemic	World Threatened ¹⁸	Australian Threatened	Australian Threatened as percentage of World Threatened
4,300	5,487	5,487	~5,500	386	7.0%	~390	87%	1,141 (~20.8%)	78 (20.2%)	6.8%



Aves (birds)

Birds are also a well known group, and the estimate of the number of described species appears quite stable, varying from as low as 9,000 (Tangley 1997), through 9,750 (Groombridge and Jenkins 2002), 9,875 (BirdLife International 2005), 9,917 (IUCN 2004), 9,946 (Gaston and Blackburn 1997) to 9,990 (IUCN 2009b). I have accepted the figure of 9,990 which is consistent with the most recent figures from BirdLife International (2008) and IUCN (2009b). Total number of species of birds on earth is estimated at around 10,000 (BirdLife International 2004, 2008), although if one accepts the figure of 9,990 already described, this figure would appear a little low.

Australian species of birds are quite well known and thus the number of described extant species is stable at around 828 (Christidis and Boles 2008). An additional 13 species are listed by Christidis and Boles as Extinct in the Wild, and 27 as introduced. Because bird species are so well known, the number of Australian endemic species is also well known at 45% (DEH 2007). I have accepted the species numbers

of Christidis and Boles as cited and accepted by Birds Australia (2009)*** ABRS (2009a) gives a figure of 869 which include the Extinct and Introduced species. Including vagrants on the mainland and island territories, we arrive at a figure approaching 900 species (Boles pers. comm. 2009).

There are 50 listed threatened bird species in Australia, and 81 listed subspecies (including one undescribed) (DEWHA 2009a). Of these, nine species and 14 subspecies are listed as Extinct in the Wild, three species and three subspecies as Critically Endangered, 16 species and 25 subspecies as Endangered, and 22 species and 39 subspecies as Vulnerable. Due to a rearrangement of taxonomy, a number of previously listed species now appear as subspecies in accordance with the taxonomy of Christidis and Boles (2008).

					Australia						Australian Threatened
1	World Descr./	World Descr./	World Descr./	World	Descr./	Australia	Australia	Australia	World	Australia	as percentage of
1	Accepted min.	Accepted max.	Accepted	Estimate	Accepted	Percent.	Estimate	Endemic	Threatened ²⁰	Threatened	World Threatened
	9,000	9,990	9,990	>10,000	828	8.3%	~900	45%	1,222 (~12.2%)	50 (6%)	4.1%

Reptilia (reptiles)

Reptiles are also quite a well known group, however the estimate of the number of described species varies considerably, ranging from 6,300 (Tangley 1997), through 8,002 (Groombridge and Jenkins 2002), 8,163 (IUCN 2004), 8,300 (EMBL Reptile Database²¹) to 8,734 (TIGR 2009). I have accepted the figure of 8,734 from the TIGR Reptile Database (TIGR 2009), the figure also accepted in The IUCN Red List of Threatened Species (IUCN 2009b). This is an increase of over 400 species since the previous report. The figures include 168 amphisbaenians, 5,079 lizards, 3,149 snakes, 313 turtles, 23 crocodiles and two tuataras.

The only estimate I have received of the total number of species is from the coordinator of the EMBL Reptile Database²². He stated that the number of new species described each year was fairly constant at around 70 per year, and estimated the total number of species at around 10 000.

The number of Australian reptile species has increased considerably in recent years and since the previous report, from 633 (DEH 2001) through 869 (DEH 2007) to 917 (ABRS 2009a). This is an increase of 48 species since 2006. ABRS (2009a) also lists 189 described subspecies. Estimates for the number of species yet to be described in Australia is around 3.5% which takes the estimated number of species to around 950. Reptile species are well known and endemism is high, reported by Healey (2001) as round 89%. This figure is here revised to 93%.

There are 46 species and seven subspecies listed as threatened in Australia (DEWHA 2009a). The list includes two species listed as Critically Endangered, 11 species and three subspecies as Endangered and 33 species and four subspecies as Vulnerable.



					Australia						Australian Threatened
1	World Descr./	World Descr./	World Descr./	World	Descr./	Australia	Australia	Australia	World	Australia	as percentage of
1	Accepted min.	Accepted max	Accepted	Estimate	Accepted	Percent.	Estimate	Endemic	Threatened ²³	Threatened	World Threatened
ı	6,300	8,734	8,734	~10,000	917	10.5%	~950	93%	423 (4.8%)	46 (5.0%)	10.9%



Amphibia (frogs, etc)

Amphibia are also quite a well known group, however the number of undescribed species is quite large with more being discovered every year. The estimate of the number of described species varies from 4.950 (Groombridge and Jenkins 2002) through 5,743 (Frost 2004), 5,802 (AmphibiaWeb 2005), 6,347 (IUCN 2009b) to 6,515 (AmphibiaWeb 2009). I have accepted the figure of 6,515 which is consistent with the most recent figures from AmphibiaWeb which maintains an up-to-date estimate. A recent paper by Alain Dubois in the journal Alytes predicts that there will be about 15,000 species of Amphibia in total (Wake pers. comm.24). Recent molecular work has shown considerable divergences between populations of 'species' (Wells pers. comm.25) and thus new species are likely to be split off in the future resulting in further increases in numbers both nationally and globally.

Australian amphibian species are quite well known and thus the number of described species is stable at around 227—an increase of just 8 species since the previous report (Doughty

pers. comm.²⁰). The estimate for the number of species yet to be described in Australia is around 1.5% (DEH 2007) which takes the estimated number of species to around 230. Amphibia are very well known and endemism is extremely high, given by as around 93% by Wong (1999) and DEH (2007). This figure is here revised to 94%.

There are 31 threatened species and one subspecies listed in Australia (DEWHA 2009a). Of these four are listed as Extinct, two Critically Endangered, 14 Endangered and 11 species and one subspecies as Vulnerable.

				Australia						Australian Threatened
World Descr./	World Descr./	World Descr./	World	Descr./	Australia	Australia	Australia	World	Australia	as percentage of
Accepted min.	Accepted max.	Accepted	Estimate	Accepted	Percent.	Estimate	Endemic	Threatened ²⁷	Threatened	World Threatened
4,950	6,515	6,515	~15,000	227	3.5%	~230	94%	1,905 (~29.2%)	31 (13.7%)	1.6%

Insecta (insects) continued

	World Descr./			Australia Descr./			
Order	Accepted	Reference	World Estimate	Accepted	Reference	Australia Estimate	Reference
Archaeognatha	470	Hallan (2003)		10	ABRS (2009a)	14	Yeates et al. (2003)
Blattodea	3,684-4,000	Hallan (2003), ABRS (2009a)		534	ABRS (2009a)	587	Yeates et al. (2003)
Coleoptera	360,000-~400,000	CSIRO43, Oberprieler44	1,100,000	22,901	Yeates et al. (2003)	80,000-100,000	Yeates et al. (2003), Oberprieler45
Dermaptera	1,816	Hallan (2003)		91	ABRS (2009a)	121	Yeates et al. (2003)
Diptera	152,956	Thompson 2008	240,00046	7,482	ABRS (2009a)	30,000	Yeates et al. (2003), Austin et al. (2004)
Embioptera	200-300	ABRS (2009a), Wikipedia47	2,000	26	ABRS (2009a)	28	Yeates et al. (2003)
Ephemeroptera	2,500-<3,000	Wikipedia48, ABRS (2009a)		113	ABRS (2009a)	333	Yeates et al. (2003)
Grylloblattaria	24	Hallan (2003)		0		0	
Hemiptera	80,000-88,000	Discover Life ⁴⁹ , Hallan (2003)		5,150-~6,000	ABRS (2009a)	11,580	Yeates et al. (2003)
Hymenoptera	115,000	Hymenoptera Online Database ⁵⁰	>300,000	9,155	ABRS (2009a)	44,000	Yeates et al. (2003), Austin et al. (2004)
Isoptera	2,600-2,800	Wikipedia51, Hallan (2003)	4,00051	263 ⁵²	ABRS (2009a)	455	Yeates et al. (2003)
Lepidoptera	174,250	Lepidoptera Taxome Project53	300,000-500,00054	10,586	Yeates et al. (2003)	20,000	Yeates et al. (2003)
Mantodea	2,200	Encyclopedia Britannica55		105	ABRS (2009a)	114-160	Yeates et al. (2003), ABRS (2009a)
Mecoptera	481	Hallan (2003)		30	ABRS (2009a)	30	Yeates et al. (2003)
Megaloptera	250-300	Hallan (2003), ABRS (2009a)		26	ABRS (2009a)	26	Yeates et al. (2003)
Neuroptera	~5,000	ABRS (2009a)		553->600	ABRS (2009a)	800	Yeates et al. (2003)
Odonata	6,500	Trueman & Rowe (2008)		321	ABRS (2009a)	330	Yeates et al. (2003)
Orthoptera	24,380	Eades & Otte (2009)		1,835	Yeates et al. (2003)	2,800	Yeates et al. (2003)
Phasmatodea (Phasmida)	2,50056-3,300	ABRS (2009a), Hallan (2003)		105	ABRS (2009a)	115-150	Yeates et al. (2003), ABRS (2009a)
Phthiraptera	>3,000-~3,200	Smith & Page (1997), ABRS (2009a)		465	ABRS (2009a)	648	Yeates et al. (2003)
Plecoptera	2,274	Hallan (2003)		192	ABRS (2009a)	196	Yeates et al. (2003)
Psocoptera	3,200-~3,500	Hallan (2003), ABRS (2009a)		293	ABRS (2009a)	293 plus many more	ABRS (2009a)
Siphonaptera	2,525	ABRS (2009a)		84	ABRS (2009a)	92	Yeates et al. (2003)
Strepsiptera	596	Kathirithamby (2002)		42	ABRS (2009a)	58-159	Yeates et al. (2003), ABRS (2009a)
Thysanoptera	~6,000	ABRS (2009a)		750	ABRS (2009a)	~1500	ABRS (2009a)
Trichoptera	12,627	Trichoptera World Checklist ⁵⁷		719	ABRS (2009a)	800	Yeates et al. (2003)
Zoraptera	28	Hallan (2003)		1	ABRS (2009a)58	1	-
Zygentoma (Thysanura)	370	Mendes (2002)		36	ABRS (2009a)	38	Yeates et al. (2003)
TOTAL	965,431-1,015,897			61,868-62,765		~194,959-215,141	

Prototyping

Website view



