MeZoo™ : Enhancing Experiential Learning for School Children

The Mobile Encyclopedia of the Zoo (MEZoo™) is an online system that delivers information about animals and plants in Zoo Negara Malaysia using a smartphone and QR code. This smartphone-based information system consists of a user interface and an inventory of animals and plants in Zoo Negara, Malaysia.

Nowadays, many of us has a smartphone. By creating this smartphone-based information system, we hope that it could help improve visitors (children, parents etc) knowledge about the animals and plants that are exhibited in Zoo Negara. This is also one of the initiatives that could help Zoo Negara to become a world class zoo. In addition, MEZoo™ could provide experiential learning experience to the children, much more powerful than books, comics or TV nature shows. This could attract the attention of children because the smartphone-based information system can give them an additional learning layer, beyond the traditional classroom learning or books. This is one of our main goal which is to provide a smart strategy to expose our children to the vast world of nature together with the use of smartphones. It is an exciting and fun way to learn and study about the animals and plants in Zoo Negara. The children will be inspired to learn more, care more, and do more to save animals and plants and as well their habitats.

The current information board about animals in the Zoo Negara has only little information about the animals such as, amazing facts, habitat and food. In order to provide more information to the visitor, each animal in the Zoo Negara was designated a specific QR code which is placed on the information board (Figure 1). Visitors will scan the QR code

using their downloadable QR code reader apps (eg. NeoReader, Quick Scan, QR Reader, and QR Scanner) in their smartphones and information about that particular animal will be readily available on their phone screen. Visitors do not need to spend much time to search for more information about the animals because they just need to scan the QR code and within a few second, the information will be displayed on their smartphone screen.

The information in the system comprises of species name, life span, colour, weight, food, habitat, behavior, reproduction, photos, videos, sounds, and other relevant information about the animals. Besides that, there are games and quizzes also being added in the system which is specially developed to seek the attraction of the children. The URL has been provided in the system and they just need to click the link. Children can learn and at the same time can play exciting games and solve interesting quizzes during their visit to Zoo Negara. Perhaps, this system will replace the manual system that has been used to deliver the animal's information such as paper base-form, pamphlet and books.

Apart from the animal information, MEZoo™ also delivers information about plants available in the Zoo Negara. Malaysia is well known for its huge biodiversity including of flora and fauna. More than 15000 higher plant species have been found in Malaysia due to the wet tropical climate, favorable conditions for the growth and evolution. Among them, several categories of plants such as palms, trees, shrubs, exotics, and herbal can be identified in Zoo Negara. The information about these plant species in the system comprises of scientific name, local name, taxonomy, origin, habitat, life span, usage and also their exact location in the zoo. Similarly, each plant species in the Zoo Negara will be designated with a specific QR code which is placed on the information board. Again, the visitors need to scan the QR code and all the information will be displayed on their smartphone.

The MEZoo™ system resides on a dedicated server at the Centre of Research for Computational Sciences and Informatics in Biology, Bioindustry, Environment, Agriculture and Healthcare (CRYSTAL), University of Malaya, Kuala Lumpur. In order to educate the visitors on how to use this system, we have also designed a special signage which will be placed at the entrance of Zoo Negara (Figure 2).

Figure 1: Signage for the Giant Panda with the QR code (Please try to scan)

Figure 2: Signage to help visitors using MEZoo

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Home
MEZoo
Games
Gallery
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Love
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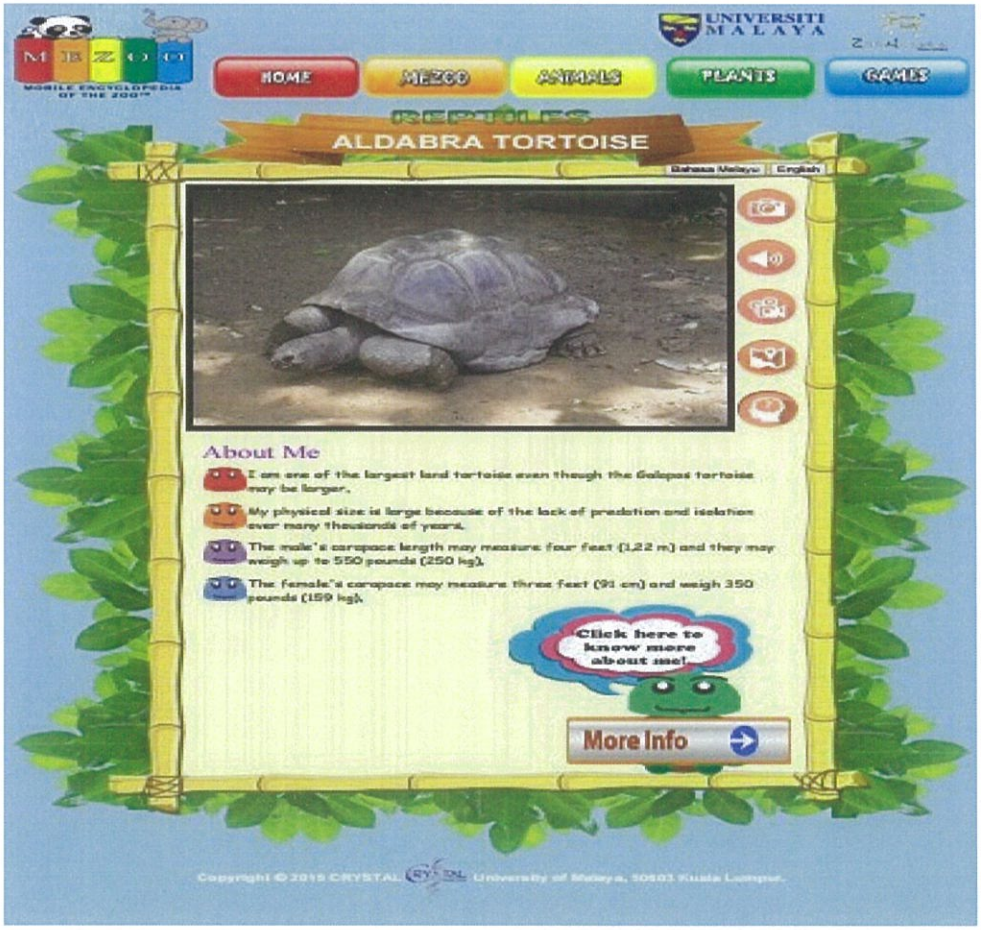
ALDABRA TORTOISE (Geochelone gigantea)
Taxonomy
Size
Lifespan
Habitat
Diet
ZOO NEGARA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MEZOO
ANIMALS
PLANTS
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REPTILES
ALDABRA TORTOISE
Bahasa Melayu
English
About Me
I am one of the largest land tortoise even though the Galapos tortoise may be larger.
My physical size is large because of the lack of predation and isolation over many thousands of years.
The male's carapace length may measure four feet (1.22 m) and they may weigh up to 550 pounds (250 kg).
The female's carapace may measure three feet (91 cm) and weigh 350 pounds (159 kg).
Click here to know more about me!
More Info
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ALDABRA TORTOISE
Bahasa Melayu
English
Scientific Name : Geochelone Gigantea
Fun Facts
Oldest recorded age is 255 years old tortoise.
Males Aldabran Tortoise have longer, thicker tails than females.
They spend the mornings and early evenings eating, and they spend the hotter parts of the day in the shade or lounging in shallow water holes.
Texonomy
Kingdom: Animalia
Phylum: Chordata
Class: Reptilia
Order: Testudines
Family: Testudinidae
Genus: Geochelone
Species: Geochelone gigantean
Key Facts
Habitat
They are found on Aldabra Island, which is northeast of Madagascar in Indian Ocean.
Diets
Primarily herbivores, Aldabra Tortoises will eat grasses, leaves, and woody plant stems. They occasionally treat in small invertebrates and carrion, even eating the bodies of other dead tortoises.
Size and weight
Its shell averages 120 cm (47 inches) in length. The average weight of a male is around 250 kg (551 pounds), but one male at the Zoo Negara weighs over 360 kg (793 pounds).
Lifespan
Over 80 years
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Capybara
Zoo Negara

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MAMMALS
MALAYAN ELEPHANT
Bahasa Melayu
English
Scientific Name : Elephas Maximus Hirsutus
Fun Facts
This huge animal can tear down trees or pick up a blade of grass with their trunks.
Asian elephants communicate via rumbles, bellows, and moans. They also emit low-frequency infrasounds that can travel several miles.
Along with dolphins and great apes, Asian elephants are the only animals known to recognize themselves in a mirror.
Texonomy
Kingdom: Animalia
Phylum: Chordata
Class: Mammal
Order: Proboscidea
Family: Elephantidae
Genus: Elephas
Species: E.maximus hirsutus
Key Facts
Habitat
Asian elephants inhabit grasslands, tropical evergreen forests, semi-evergreen forests, moist deciduous forests, dry deciduous forests and dry thorn forests, in addition to cultivated and secondary forests and scrublands.
Diets
They feed on grasses, but large amounts of tree bark, roots, leaves and small stems are also eaten. Cultivated crops such as bananas, rice and sugarcane are their favorite foods.
Size and weight
Asian elephants grow up to 21 feet long, stand up to 10 feet tall, and weigh up to 11,000 pounds.
Lifespan
55 - 70 years
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About Me
I consume around 2000 kg of food a day.
I am the largest living land animals in Asia.
My trunk contains as many as 150 000 muscles unit.
I am the largest consumer of plants among the terrestrial animals.
Click here to know more about me!
More Info
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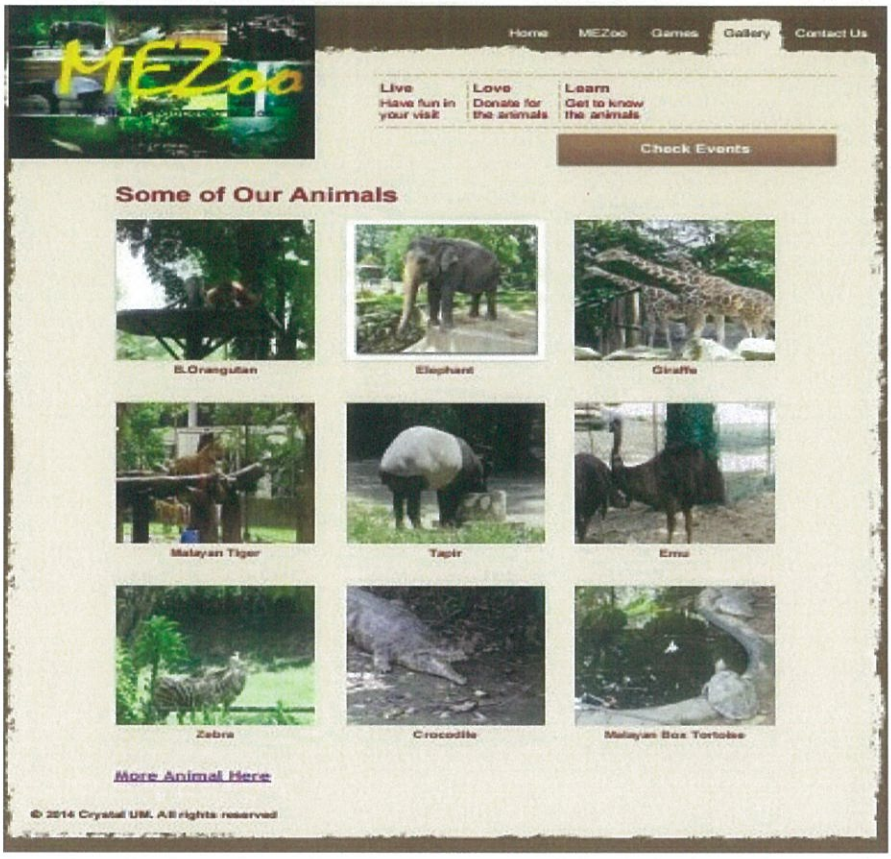
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Giraffe
Malayan Tiger
Tapir
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Crocodile
Malayan Box Tortoise
More Animal Here
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Reptiles
++ MORE REPTILES
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Fish
++ MORE FISH
Amphibians
Banded Bull Frog
Bornean Horned Frog
Green Paddy Frog
Jade Tree Frog
++ MORE AMPHIBIANS
Arthropods
Madagascar Rainbow Moth
Atlas Moth
Rajah Brooke's Birdwing
Tarantula Curly Haired
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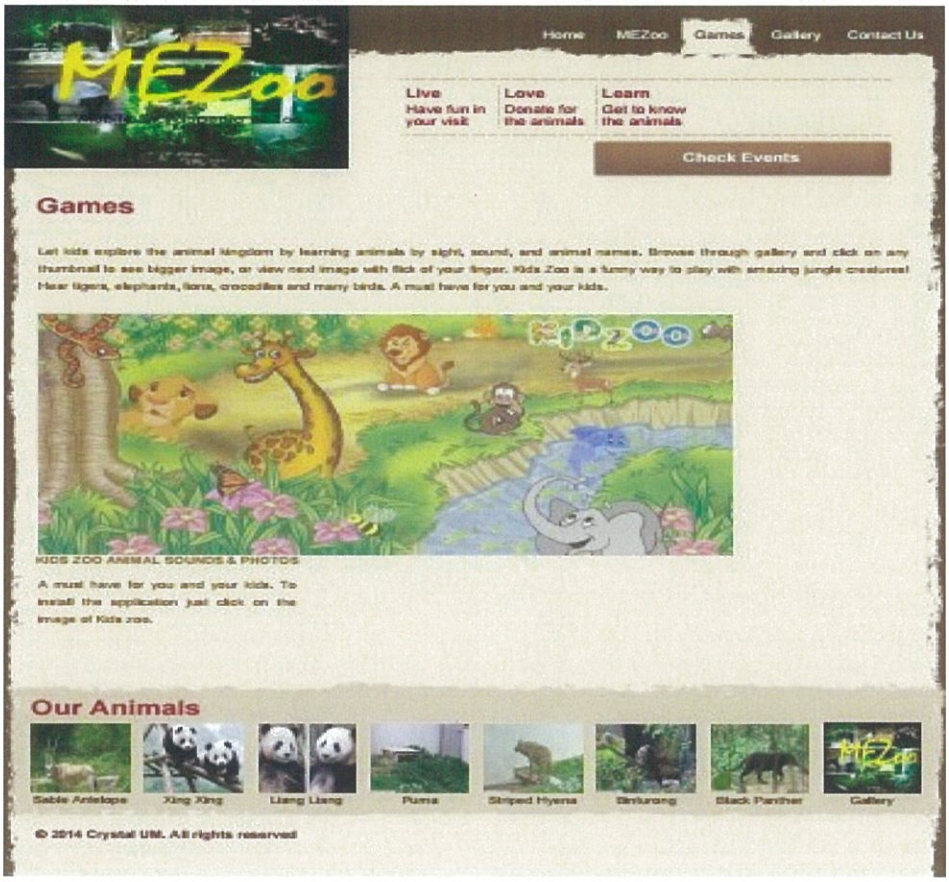
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Games
Gallery
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Let kids explore the animal kingdom by learning animals by sight, sound, and animal names. Browse through gallery and click on any thumbnail to see bigger image, or view next image with flick of your finger. Kids Zoo is a funny way to play with amazing jungle creatures! Hear tigers, elephants, lions, crocodiles and many birds. A must have for you and your kids.
KIDS ZOO ANIMAL SOUNDS & PHOTOS
A must have for you and your kids. To install the application just click on the image of Kids zoo.
Our Animals
Sable Antelope
Xing Xing
Liang Liang
Puma
Striped Hyena
Binturong
Black Panther
Gallery
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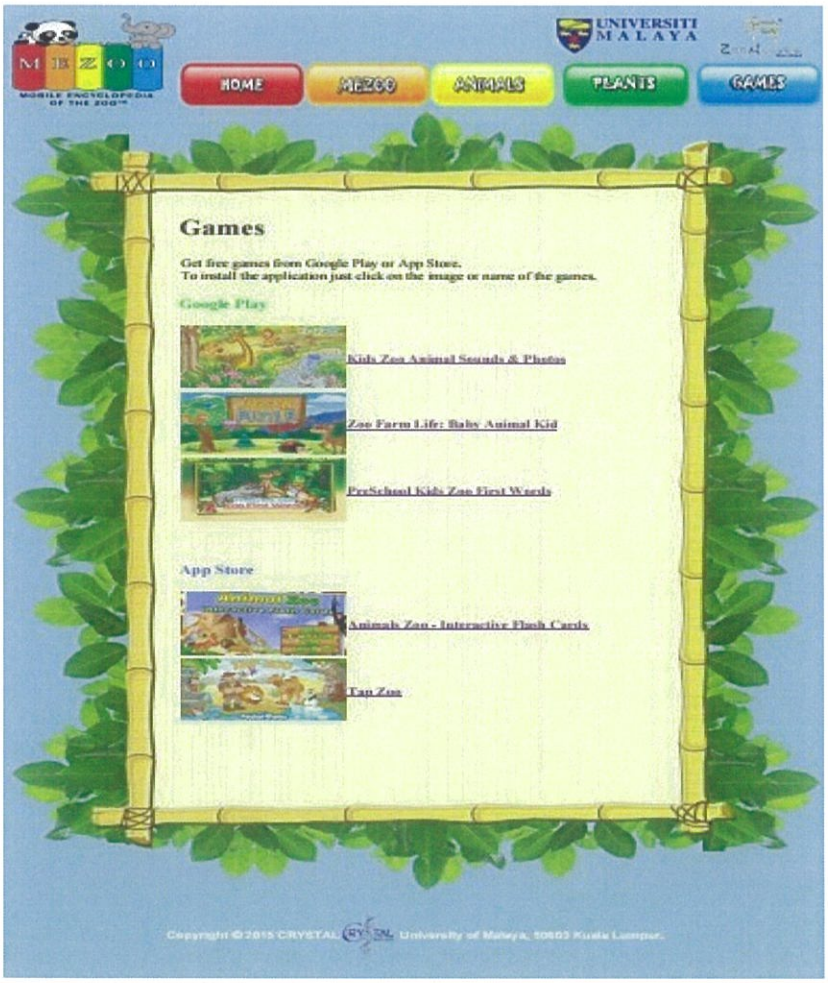
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Zoo Farm Life: Baby Animal Kid
PreSchool Kids Zoo First Words
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Tap Zoo
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Greater Flamingo
ZooNegara
Scientific name : Phoenicopterus roseus
Incubation period : Around 30 days
Threats : Water pollution, habitat loss & eggs harvesting
Worms, insects, crabs, prawn & small fish
Central & South America, Southwestern Europe, Asia & Africa
Shallow saltwater lakes, coastal lagoons & mud flats
20 - 30 years in the wild
1 Mendapat warna merah jambu melalui makanan yang dimakannya
Get their bright pink colour from their diet. The pink shrimps that they eat give them their unique colour.
2 Anak flamingo berwarna kelabu atau putih dan mengambil masa sehingga 3 tahun untuk berubah warna seperti flamingo dewasa.
Flamingo chicks are born grey or white and take up to three years to reach their mature pink, orange or red plumage.
3 Spesis flamingo yang terbesar dan boleh mencapai sehingga 1.5 meter dan seberat 3kg.
The largest flamingo species and can measure up to 1.5 meter tall but only weighs a maximum of 3kg.
Looking for more info about me? Please scan here

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HOME
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ANIMALS
PLANTS
GAMES
TREES
HUJAN-HUJAN
Bahasa Melayu
English
NO IMAGE
Scientific Name : Samanea Saman
About Me
I am a huge, shady tree.
People and animals usually like to sit under me for a shade.
I am unique! I fold my leaves when it rains.
I can live for a very long time, up to 100 years!
Fun Facts
This tree has a unique habit of folding its compound leaves at dusk or when it rain.
Planted as a shade tree in urban areas and farm areas due to its umbrella-like crown.
Traditional remedy for colds, diarrhea, headache, intestinal ailments and stomachache.
NO IMAGE
NO IMAGE
Key Facts
Origin : South America.
Habitat : Lowland.
Size : 15 - 25 m in height.
Lifespan 80 - 100 years.
Taxonomy
Kingdom: Plantae
Division: Magnoliophyta
Class: Magnoliopsida
Subclass: Rosidae
Order: Fabales
Family: Fabaceae / Leguminosae
Genus: Samanea
Species: Samanea Saman
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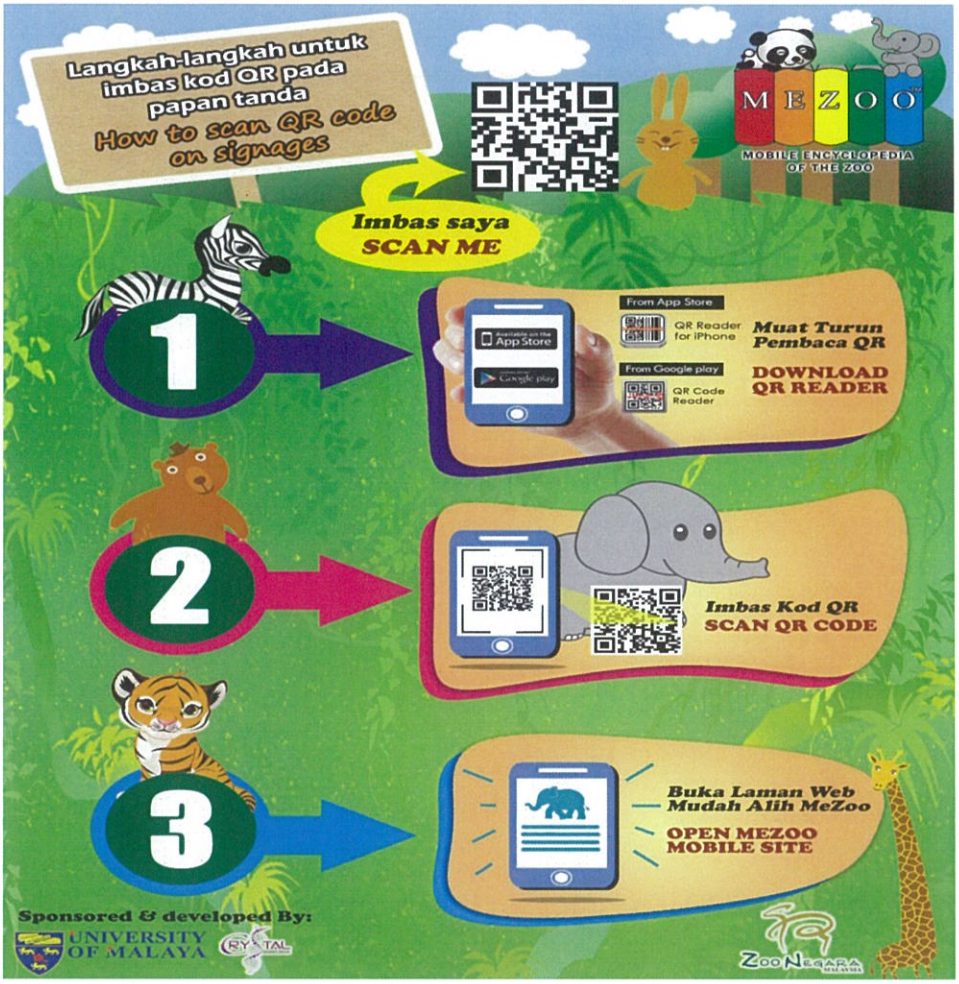
Langkah-langkah untuk imbas kod QR pada papan tanda
How to scan QR code on signages
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MOBILE ENCYCLOPEDIA OF THE ZOO
Imbas saya
SCAN ME
1
From App Store
QR Reader for iPhone
Muat Turun Pembaca QR
From Google play
QR Code Reader
DOWNLOAD QR READER
2
Imbas Kod QR
SCAN QR CODE
3
Buka Laman Web Mudah Alih MeZoo
OPEN MEZOO MOBILE SITE
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ZooNegara

HOME
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PLANTS
GAMES
Palms
Trees
Shrubs
Herbal
Other Plants

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PLANTS
GAMES
non-governmental organization.
Zoo Negara covers 110 acres of land which is situated only 5km from the city of Kuala Lumpur.
Mammals
Reptiles
Birds
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Fish
Amphibians
Arthropods

Home
MEZoo
Games
Gallery
Contact Us
Live
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Giant Panda Conservation and Research Center
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Fun Fact about Animal
News
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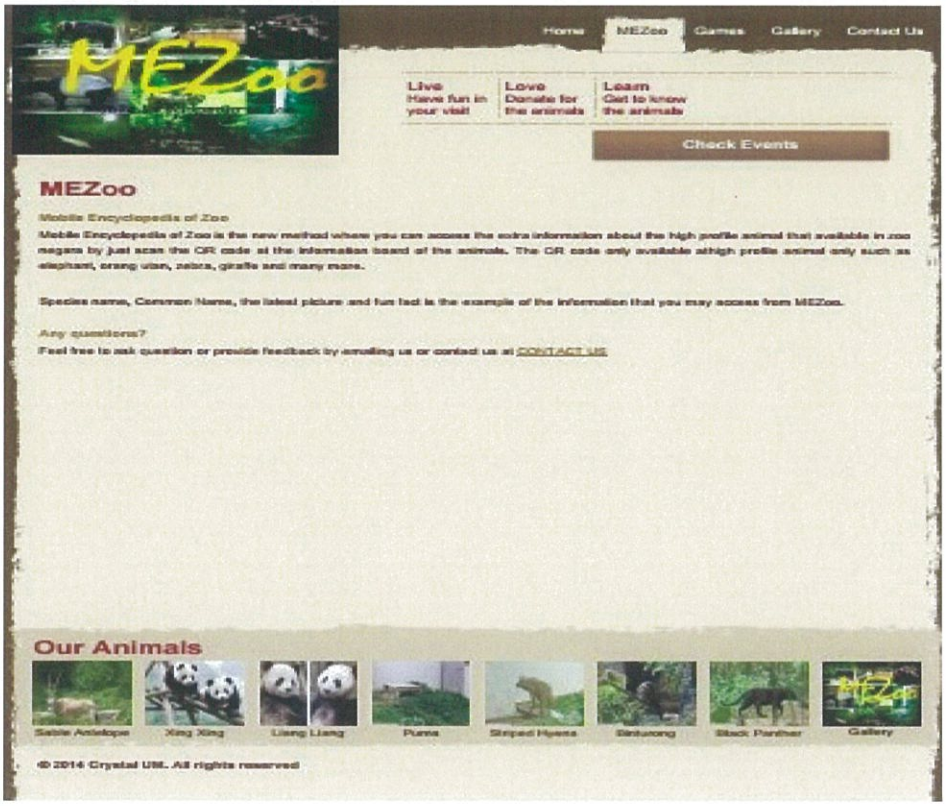
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Home
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Games
Gallery
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Mobile Encyclopedia of Zoo
Mobile Encyclopedia of Zoo is the new method where you can access the extra information about the high profile animal that available in zoo negara by just scan the QR code at the information board of the animals. The QR code only available athigh profile animal only such as elephant, orang utan, zebra, giraffe and many more.
Species name, Common Name, the latest picture and fun fact is the example of the information that you may access from MEZoo.
Any questions?
Feel free to ask question or provide feedback by enrolling us or contact us at CONTACT US
Our Animals
Sable Antelope
Xing Xing
Liang Liang
Puma
Striped Hyena
Sinturong
Black Panther
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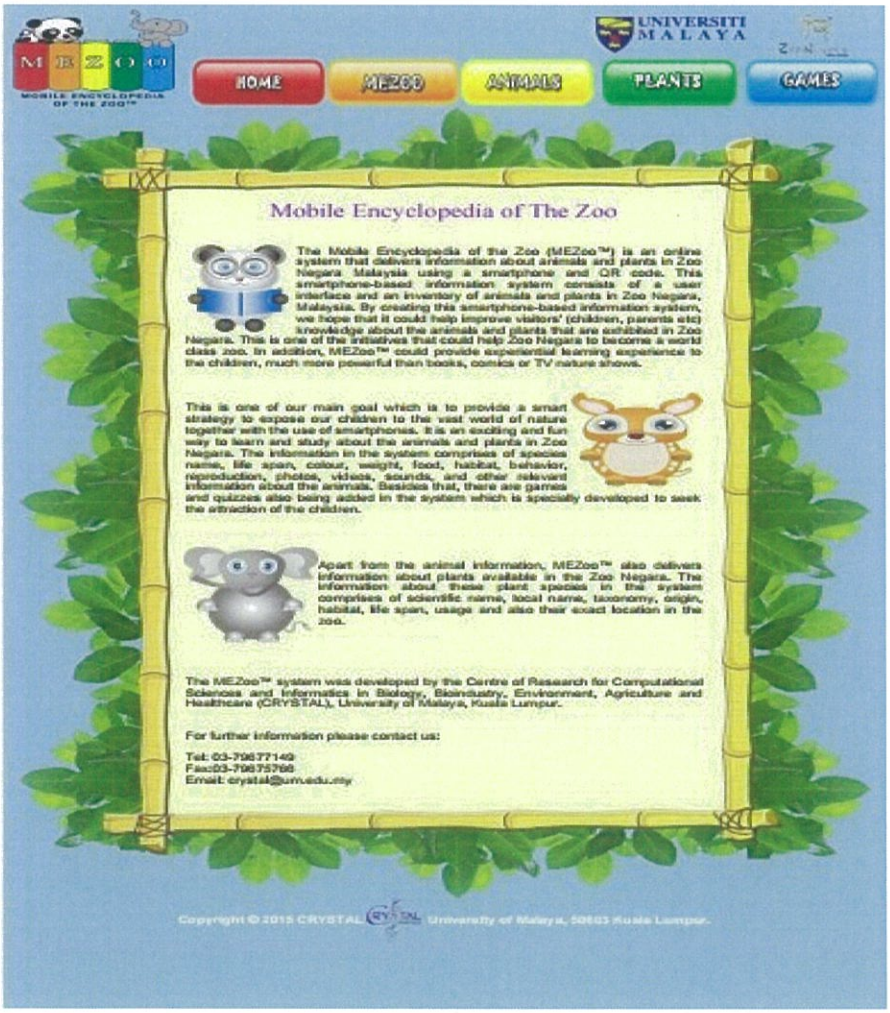
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PLANTS
GAMES
Mobile Encyclopedia of The Zoo
The Mobile Encyclopedia of the Zoo (MEZoo™) is an online system that delivers information about animals and plants in Zoo Negara Malaysia using a smartphone and QR code. This smartphone-based information system consists of a user interface and an inventory of animals and plants in Zoo Negara, Malaysia. By creating this smartphone-based information system, we hope that it could help improve visitors' (children, parents etc) knowledge about the animals and plants that are exhibited in Zoo Negara. This is one of the initiatives that could help Zoo Negara to become a world class zoo. In addition, MEZoo™ could provide experiential learning experience to the children, much more powerful than books, comics or TV nature shows.
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Apart from the animal information, MEZoo™ also delivers information about plants available in the Zoo Negara. The information about these plant species in the system comprises of scientific name, local name, taxonomy, origin, habitat, life span, usage and also their exact location in the zoo.
The MEZoo™ system was developed by the Centre of Research for Computational Sciences and Informatics in Biology, Bioindustry, Environment, Agriculture and Healthcare (CRYSTAL), University of Malaya, Kuala Lumpur.
For further information please contact us:
Tel: 03-79677149
Fax:03-79675766
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ZOO NEGARA
MALAYSIA
GIANT PANDA
Xing Xing : Looking for info about us?
Liang Liang: Scan the QR code.

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3
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UNIVERSITI MALAYA
HOME
MEZOO
ANIMALS
PLANTS
GAMES
MAMMALS
Giant Panda
Bahasa Melayu
English
About Me
I love to eat bamboos.
I am a skilled tree-climbers and efficient swimmers.
I have black and white patches on my body, muzzle, legs and also shoulders.
I have thick and wooly coat of furs to keep me warm in the cool forests of my habitat.
I can be found living in a few mountain ranges in central China, in Sichuan, Shaanxi including Gansu provinces.
Click here to know more about me!
More Info

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3
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GAMES
MAMMALS
GIANT PANDA
Bahasa Melayu
English
Scientific Name : Ailuropoda melanoleuca
Fun Facts
Panda use their five fingers and a special wrist bone to grasp bamboo stalks.
They does not hibernate. However, they will shelter in caves or hollow trees in very cold weather.
There are a total number of 44 giant pandas which live in the zoos outside of China.
Texonomy
Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Carnivora
Family: Ursidae
Genus: Ailuropoda
Species: A.Melanoleuca
Key Facts
Habitat
They are living in the remote mountainous regions in Central China
Diets
Their diet consists mainly the leaves, stems, and shoots of various bamboo species.
Size and weight
The length can be range to about 5 feet (1.5 meters). For the weight, the male: 190 to 275 pounds (86 to 125 kilograms) and the female: 155 to 220 pounds (70 to 100 kilograms)
Lifespan
The life duration is ranging from 14 to 20 years in the wild, while up to 30 years in managed care.
To known more about history, news and views about Malaysia's giant panda, you can visit this site Click here
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PLANTS
GAMES
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Kelapa
Pinang Rajah
More Palms++
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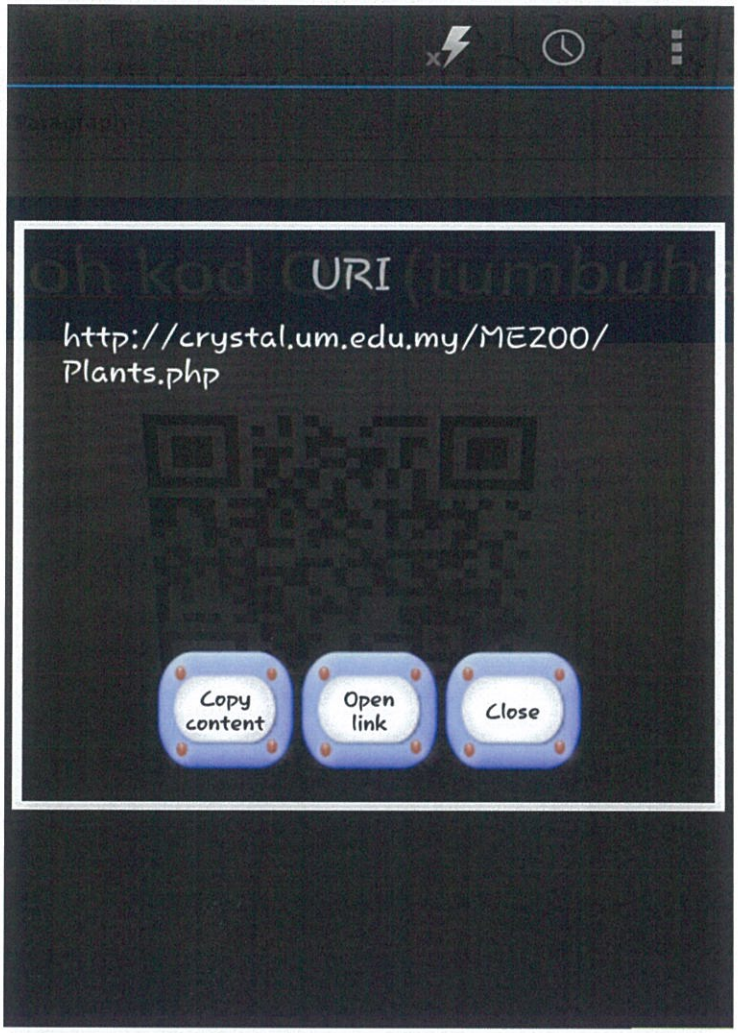
Hujan-Hujan
Mempari
Pulai
Jati
More Trees++
Shrubs
Serai Wangi
Misai Kucing
Bunga Jari
Keladi Bunting
More Shrubs++
Herbals
Lidah Buaya
Kunyit
Bunga Cina
Lengkuas
More Herbs++
Other Plants
Giant Maidenhair
Blue Club Moss
Bird Nest Fern
Joyweed
More other Plants ++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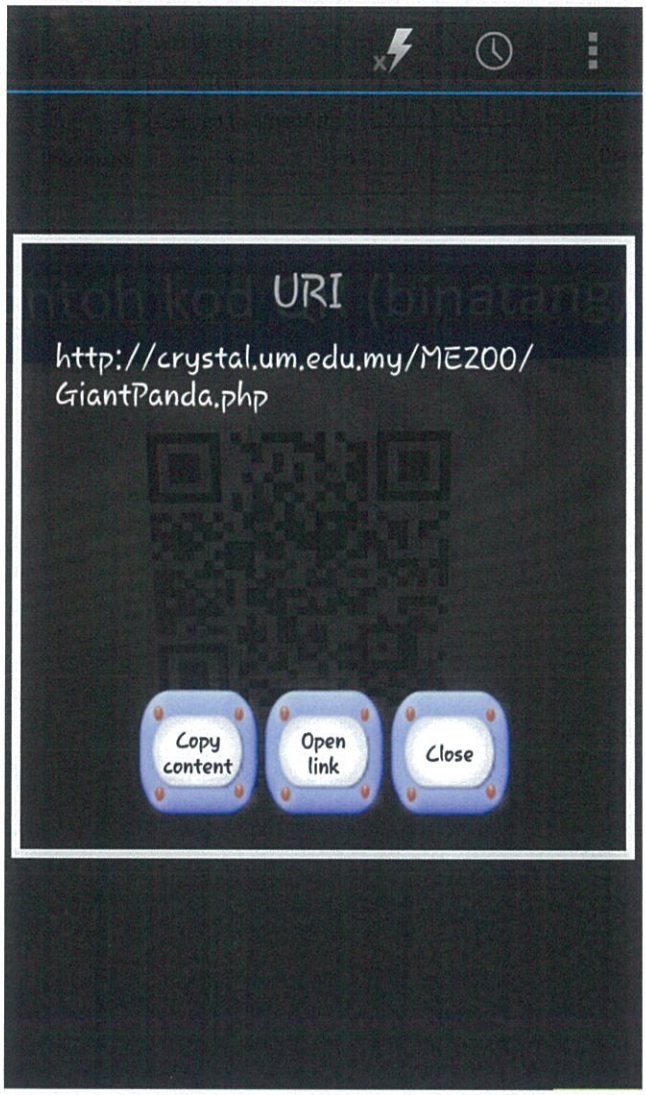
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Tapir
Malayan Tapir
ZOO NEGARA
Scientific name : Tapirus indicus
Gestation period : 13 months
Threat : Habitat loss
Aquatic vegetation, fruits & leaves
Thailand, Myanmar, Malaysia & Indonesia (Sumatra)
Tropical rainforest
Around 30 years in the wild
1 Juga dikenali sebagai Tapir Asia. Ia merupakan spesis terbesar dan mengalami evolusi di antara empat spesis yang lain. Ia merupakan spesis pra-sejarah yang masih hidup.
Also known as the Asian Tapir. It is the largest and most evolutionarily distinct of the four living species of tapir. It is also the only surviving Old World species.
2 Mempunyai jalur-jalur putih semasa kecil.
Tapir calves have white dotted stripes.
Looking for more info about me? Please scan here
3 Mempunyai 4 batang jari di bahagian kaki hadapan dan 3 batang jari di bahagian kaki belakang.
Have 4 toes on each front foot and 3 toes on each back foot.
ZOO NEGARA
the noise
climb into trouble
object will hurt us!