

VIRTUAL MUSEUM OF THE MAGICAL TOWN OF ZACATLÁN, PUEBLA

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Abstract - Virtual museums are indispensable sites; they favor the diffusion of science; making possible to know cultural and natural aspects of other countries. The objective of this project is to create the virtual museum of the Magical Town of Zacatlan using tools such as Adobe Animate®, Adobe Dreamweaver®, CorelDRAW® and Adobe Photoshop® ; with information on flora, fauna, gastronomy, culture and history collected by research teachers and students of the Instituto Tecnológico Superior de la Sierra Norte de Puebla (ITSSNP). The work team is multidisciplinary, composed of research professors specialized in computer science and biology, as well as computer engineering and forestry engineering students. The municipality of Zacatlan, Puebla needs to meet requirements to keep the title of magical town; among them, to have a natural and cultural museum, which is why the virtual page is proposed to the Citizen Committee of the Magical Town and the Municipal Council of Chroniclers of Zacatlan. This led to the signing of a collaboration agreement to integrate cultural and historical information. The results obtained so are four modules; the first module is the fauna, composed of birds, reptiles and mammals. The birds section has a record of thirty-five endemic, migratory and resident birds. The second section describes seven reptiles and the last section refers to seven mammals. Images, common and scientific names, taxonomy, sounds and animations are included. Maps of each locality and rural community were designed to provide information on the species in their habitat. The second flora module details twenty-nine species with image, common name, scientific name and taxonomy. The third culture module

integrates gastronomic information and traditional festivities. The fourth newspaper library module houses copies of 100 newspapers from 1894 to 2018 and 100 magazines from 1948 to 2016 with historical, cultural, social and political information about Zacatlan. The last module contains virtual tours of tourist attractions in the historic center of the municipality.

Keywords: Science dissemination, Puebla culture, Flora and fauna of Puebla, Sierra Norte, multidisciplinary project.

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section has a record of thirty-five endemic, migratory and resident birds. The second section describes seven reptiles and the last section refers to seven mammals. Includes image, common name, scientific name, taxonomy, sounds and animations. Maps of each locality and rural community were designed to offer information on the species in their habitat. The second flora module details twenty-nine species with image, common name, scientific name and taxonomy. The third culture module integrates gastronomic information and traditional festivals. The fourth newspaper library module houses copies of 100 newspapers from 1894 to 2018 and 100 magazines from 1948 to 2016 with historical, cultural, social and political information about Zacatlán. The last module contains virtual tours of tourist attractions in the historic center of the municipality.

Key words - Dissemination of science, Culture of Puebla, Flora and fauna of Puebla, Sierra Norte, multidisciplinary project.

INTRODUCTION

The purpose of virtual museums is to encourage science to become part of the general culture of society [1]. The combination of museums with the computer environment has given rise to the existence of virtual museums that provide meaningful experiences without the need to go to the physical space [2]. The magical town of Zacatlán is located in the northern highlands of Puebla, Mexico at an altitude of 2,000 m; it has a mountain climate, temperate sub-humid, its average temperature is 14 ° C. With ranges that vary between 13 and 3° C [3]. These are ideal conditions for Zacatlán to have natural and cultural richness. Nature, history and culture become the backbone for inland tourism; heritage that is a source of value and wealth, to generate local welfare [4]. ITSSNP teaches Computer Engineering and Forestry Engineering; an ideal situation to generate in a multidisciplinary way the virtual museum of the Magic Town of Zacatlán. Throughout the years, the research professors and students of Forestry Engineering have generated information about the flora and fauna of the region. For the cultural, gastronomic and historical theme, an agreement was signed with the Citizen Committee (valid from November 2021 to November 2023) and the Municipal Council of Chroniclers of Zacatlán. ITSSNP's commitment to the community is evident through the establishment of links with the organized community of Zacatlán to implement innovation and technology; creating a modern and attractive image for the magical town. Economically, the creation of a virtual museum of flora and fauna in a magical town provides an extra attraction for tourists that can generate income for the community [5]. The global accessibility of the virtual museum allows it to reach a wider audience, transcending the geographical and temporal limitations of a traditional museum. Another benefit is the increase of visitors to the town.

The virtual museum offers a unique experience that highlights the flora, fauna, gastronomy, customs, traditions and history; this benefit translates into an economic boost through tourism, as well as a greater diffusion and recognition of the Pueblo Mágico at a national and international level [6]. It allows people from all over the world to access and get to know the magical town, increasing its visibility and attractiveness at an international level [7]. Socially, the impact is related to tourism, offering options for the community to take advantage of tourism. One of the challenges or problems that Zacatlán faces is to maintain the status of Pueblo Mágico and one of the requirements is that it must have a natural museum. Municipalities in Mexico that seek recognition as "Magical Towns" must comply with strict requirements established by the Federal Ministry of Tourism. Currently, there are about 132 Pueblos Mágicos in the country, with a significant concentration in Jalisco, Michoacán and Puebla [8]. However, some places, such as Papantla, Veracruz, Tepoztlán, Morelos and Mexcaltitán in Nayarit, have lost their status [9]. The hypothesis of this research is derived from the following question; Is the Virtual Museum a tool for the diffusion of the natural and cultural richness of the magical town of Zacatlán? So the hypothesis is as follows; with the Virtual Museum will provide a tool for the dissemination of the natural and cultural wealth of the magical town of Zacatlán. Then there are two variables, the independent variable is the Virtual Museum and the dependent variable is the tool for the dissemination of the natural and cultural wealth of the magical town of Zacatlán. The general objective of this project is to create the virtual museum of the Magical Town of Zacatlán through the use of different tools such as Adobe Animate®, Adobe Dreamweaver®, CorelDRAW®, Adobe Photoshop® during the period January-December 2024 with natural, cultural and historical information of Zacatlán.

DEVELOPMENT

Type of research

The present research is qualitative; by investigating different sources of research related to the virtual museum in Zacatlán. It is quantitative because surveys were applied and analyzed with descriptive and basic statistics. It is descriptive; this study specifies information such as scientific names, characteristics, region where they are located, and sounds of the fauna, as well as flora, culture and history of the Zacatlán; it is the basis for the determination of proposals and/or actions for the benefit of the community. The study is a cross-sectional study; it began in January - December 2023 and meetings and interviews were held with the Pueblo Mágico Citizen Committee (November 2021 to November 2023) and with the Municipal Council of Chroniclers of Zacatlán.

Population or universe/sample

To calculate the sample size, the finite population formula was applied; 82 students were surveyed in order to gather the requirements of the Zacatlan Virtual Museum's web page.

Procedure for the development of the Virtual Museum website

The prototype model [10] was chosen due to the evolving nature of the project, which requires continuous refinement of requirements to meet customer needs. UML® (Unified Modeling Language) was used to identify software requirements and represent the system functionality. For version management, ITIL® (Information Technology Infrastructure Library) methodology was applied and GitHub® (Collaborative Development Platform) was used for project management and code version control. The architecture is based on the client-server pattern. Regarding data access security, the AES (Advanced Encryption Standard) encryption algorithm was used.

The following is a description of what was done in each of stages of the prototype model:

1.- Research and compilation of content Identification of requirements:

For the creation of the web page of the Virtual Museum of flora, fauna, gastronomy, culture and history of Zacatlan, a questionnaire was carried out in Google Forms® in order to collect information on design and navigability for users. The information required for the identification and validation of the flora and fauna has been collected and ratified by a student of Forestry Engineering and two biologist teachers of Forestry Engineering and Sustainable Agricultural Innovation respectively. The field sampling and identification work, for the flora and fauna of Zacatlan and its localities or rural communities, has been carried out through the Community Biodiversity Monitoring (BIOCOMUNI) [11]; over the years by the aforementioned research professors.

A collaboration agreement was signed between the ITSSNP and the Citizen Committee of the Magic Town of Zacatlan (see Annex 1). For the integration of information and identification of design and development requirements for the culture and history modules, several meetings and work interviews were held with the Pueblo Mágico Citizen Committee and the Municipal Council of Chroniclers of Zacatlán (see Figure 1).



Figure 1. Meeting with the Citizen Committee of the Magical Town of Zacatlan.

The members of the Citizen Committee belonging to the Municipal Council of Chroniclers allowed the consultation and scanning of the historical archives of Zacatlan.

2. Structure and navigation design:

To create an architecture that facilitates the exploration and understanding of the content of the virtual museum, an identifier was required for content categories such as flora, fauna, gastronomy, culture and newspaper library. It was essential to establish a hierarchy of information to prioritize the most important content.

Site maps and user interface sketches were created to visualize the structure and navigation (see Figure 2).

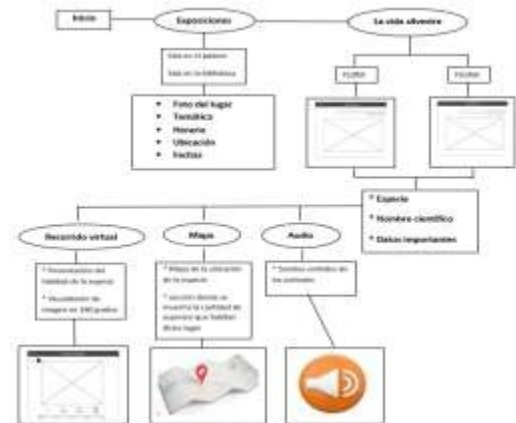


Figure 2. Structure and navigation of the flora and fauna modules.

Adobe Dreamweaver® was used for the design and creation of the virtual museum's web page modules.

3. Prototyping of the museum sections:

Preliminary versions of the museum sections were developed to evaluate their functionality and presentation. Interactive prototypes were created for each section of the museum. Basic content and essential functionalities were included to represent the final experience.

Obtaining early feedback from users and experts to make adjustments and improvements.

The implementation of interactive fact sheets for each species provides detailed information in a visually appealing way. It includes images, videos and sounds to enrich the user experience.

First division, Home (Index).

In this section we developed the important tabs on the navigability of the museum, which consists of several sections; the first one has sliders that show the welcome and content menu of the virtual museum (see Figure 3 and 4).



Figure 3. Structure and navigation of the museum modules, tours and maps.

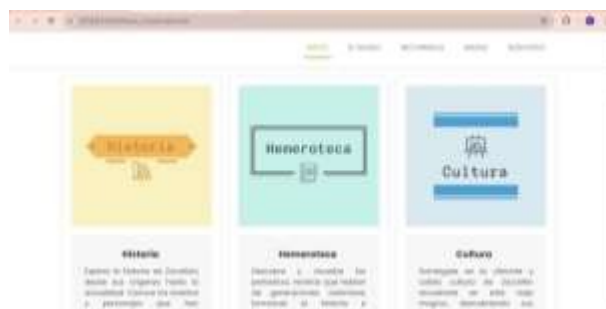


Figure 4. Structure and navigation of history, periodicals and culture.

Fauna Module.

It is intended for fauna categories for visualization and interaction. The fauna section is divided into four categories: birds, reptiles, amphibians and mammals; with scientific name, common, taxonomy and sounds by species. In the birds category (see Figure 5), information on thirty-five species is available.



Figure 5. Bird category.

In the amphibian category (see Figure 6), two species have been recorded.



Figure 6. Amphibian category.

In the reptile category, there is evidence of seven species (see Figure 7).



Figure 7. Reptile category.

The mammal category (see Figure 8) includes seven species.



Figure 8. Mammal category.

4. Development of interactive content:

In this stage the intention was to create multimedia elements and functionalities that improve user participation and the educational experience. First the visual content was developed, such as images, videos, virtual tours were added. For the virtual tours we implemented Marzipano®, the 360° tours in Panoraven®. For 3D animations, Blender® and Adobe Animate® were used for 2D animations, as well as Adobe Photoshop® and CorelDRAW®. With the implementation of the above tools, the proper integration of multimedia elements and compatibility with different platforms is achieved. The interactive exploration will allow visitors to explore the museum in a participatory way, facilitating the search and discovery of the different species present in the region.

The maps module presents animated information on species by community (see Figure 8).



Figure 8. Map module.

Section where we can know from 104 localities and rural communities of Zacatlan [12]; and the species that inhabit them. Each map contains the symbology with which you can know the location and coordinates. When accessing each locality or rural community there is an audio and visualization of each species.

5. Integration of navigation and functionalities: This consisted of linking the different sections of the museum and ensuring that the functionalities operate in a coherent manner. By integrating the navigation according to the established design, we ensured the functionality of the tours and that the animations are correctly implemented. Extensive testing was vital to identify potential integration issues. This phase ensured that the virtual museum is available for public access through the Internet. Security measures were considered to protect the integrity of the information and the privacy of the users.

6. Visual design and user experience:

The purpose was to create an attractive and user-friendly interface (see Figure 1) that enhances the user experience. The key steps are to design a visual interface consistent with Zacatlan's identity and the natural, cultural and historical themes. Optimize the layout of elements for intuitive navigation. User Experience Design (UX) principles (focus on the user, prioritize content, error prevention, accessibility, create an intuitive, aesthetic but effective space, usability) were incorporated to improve user interaction with the Virtual Museum website [13].

Was it easy to navigate the Virtual Museum of the Magical Town of Zacatlan?



Graph 1. Was it easy to navigate the Virtual Museum of the Magical Town of Zacatlan?

7. Testing and feedback [14]:

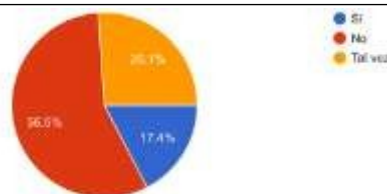
It consisted of identifying potential problems and gathering feedback to improve the virtual museum before its launch. Usability has been conducted with a representative number of users. Feedback has been collected on ease of use, clarity of content and educational effectiveness. Iteration in design and functionality has been done based on the feedback received.

User feedback: a feedback system was integrated to allow visitors to contribute to the continuous improvement of the virtual museum.

DISCUSSION AND ANALYSIS OF RESULTS

The results obtained in the development of the virtual museum's website virtual museum of Zacatlan about flora, fauna, gastronomy fauna, gastronomy, culture and newspaper library reflect the natural and cultural richness of the region. The platform offers an interactive experience rich in content, highlighting the importance of disseminating science; due to the fact that, when interviewing users, 56.5% were unaware of the flora and fauna of the Zacatlan region (see Graph 2).

Did you know the different species that live in the towns and rural communities of the Magical Town of Zacatlan?



Did you know the different species that live in the towns and rural communities of the Magical Town of Zacatlan?

Accessibility and Navigation:

Attention needs to be focused on accessibility; with an intuitive user interface that allows visitors to easily navigate between categories in the flora, fauna, gastronomy, culture and history modules, and visible and attractive links facilitate exploration.

Validation of the species list confirms taxonomic accuracy, supporting the importance of accurate identification in building virtual collections [15]. This approach ensures that the information provided is scientifically valid and reliable. This multidisciplinary process through due advice from forestry and computer specialists not only validates the presence of 75 flora and 51 fauna species, 100 copies of journals and 100 copies of newspapers from the historical archive, in the system, but also provides a valuable database that can be used for conservation, biodiversity monitoring and informed decision making in the management of the local ecosystem.

The list of validated fauna species is presented below (see Table 1):

Table 1. List of birds, amphibians, reptiles and mammals. integrated into the virtual museum of the magical town of Zacatlan.

Category	N.	Name common	Scientific name
Birds	1	White heron	<i>Ardea alba</i> Ardeidae
	2	Blue heron	<i>Egretta</i> Ardeidae
	3	Common Buzzard	<i>Coragyps atratus</i> Cathartidae
	4	Sparrowhawk	<i>Accipiter cooperii</i> : Accipitridae
	5	Eaglet	<i>Buteo platypterus</i> Accipitridae
	6	Red-winged Red-tailed Hawk	<i>Buteo Jamaicensis</i> Accipitridae
	7	Redfish	<i>Fulica</i> Rallidae
	8	Paloma Encinera	<i>Patagioenas fasciata</i> Columbidae
	9	Paloma from Turkish necklace	<i>Streptopelia decacto</i> Columbidae
	10	Tortolita	<i>Columbina inca</i> Columbidae
	11	Hummingbird from Owl Tower	<i>Tyto alba</i> Tytonidae
	12	Hummingbird	<i>Lampornis clemenciae</i> Trochilidae
	13	Woodpecker	<i>Melanerpes formicivorus</i> Picidae
	14	Mosquero Minimum	<i>Empidonax minimus</i> Tyrannidae
	15	Cardinal	<i>Pyrocephalus rubinus</i> Tyrannidae
	16	Pechigris	<i>Aphelocoma ultramarine</i> Corvidae
	17	Swallow	<i>Hirundo rustica</i> Hirundinidae
	18	Tile	<i>Sialia sialis</i> Turdidae
	19	Clarion Goldfinch	<i>Myadestes occidentalis</i> Turdidae
	20	Pichochoque	<i>Turdus migratorius</i> Turdidae
Amphibians	21	Cuitlacoche curved beak	<i>Toxostoma curvirostre</i> Mimidae
	22	Skylark	<i>Sturnus vulgaris</i> Sturnidae
	23	Tealight	<i>Myioborus pictus</i> Parulidae
	24	Spotted Scraper	<i>Pipilo maculatus</i> Passerellidae
	25	Hilama	<i>Melozona fusca</i> Passerellidae
	26	Zacatonero Serrano	<i>Oriturus superciliosus</i> Passerellidae
	27	Junco eyeworms	<i>Junco</i> Passerellidae
	28	Calandria	<i>Pheucticus melanocephalus</i> Cardinalidae
	29	Greater stiltgrass	<i>Quiscalus mexicanus</i> Icteridae
	30	Goldfinch dominico	<i>Spinus psaltria</i> Frigillidae
	31	Sparrow	<i>Passer domesticus</i> Passeridae
	32	Common Parula	<i>Parula rubra</i> Cardinalidae
	33	Red-headed Sparrow	<i>Haemorhous mexicanus</i> Fringillidae
Reptiles	34	Carpenter Mexican	<i>Dryobates</i> Picidae
	35	Matraquita	<i>Corthylio calendula</i> Regulidae
	36	Tree frog	<i>Hyla eximia</i> Hylidae
	37	Ranita from cannon	<i>Hyla arenicolor</i> Hylidae
	38	Scorpion	<i>Barisia imbricata</i> Anguidae
	39	Snake ribbon	<i>Thamnophis scaliger</i> Colubridae
	40	Snake aquatic	<i>Thamnophis proximus</i> Colubridae
	41	Turtle	<i>Kinosternon</i> sp. Kinosternidae
	42	Techin	<i>Sceloporus mucronatus</i> Pryn timer
	43	Chameleon	<i>Prynosoma</i>

		<i>orbiculare</i>
		Prynomatidae
	44	Rattlesnake
		<i>Crotatus ravus</i>
		Viperidae
Mammal	45	Gray fox
os		<i>Urocyon</i>
		<i>cinereoargenteu</i>
		Canidae
	46	Coyote
		<i>Canis latrans</i>
		Canidae
	47	Tlacuache common
		<i>Didelphis marsupialis</i>
		Didelphidae
	48	Rabbit Serrano
		<i>Sylvilagus cunicularius</i>
		Leporidae
	49	Skunk
		<i>Mephitis macroura</i>
		Mephitidae
	50	Cacomixtle
		<i>Bassariscus astutus</i>
		Procyonidae
	51	Gray squirrel
		<i>Sciurus aureogaster</i>
		Sciuridae

The list of validated flora species is shown below (see Table 2):

Table 2. List of flora in the virtual museum of the village of Zacatlan.

Rural community	N.	Common name	Name scientist
locality			
Jicolapa	1	Birch	<i>Alnus acuminata</i>
	2	Elderberry	<i>Sambucus</i> sp.
	3	Rosemary	<i>Salvia rosmarinus</i>
	4	Arnica	<i>Heterotheca inuloides</i>
	5	Calendula	<i>Calendula officinalis</i>
	6	Peas	<i>Pisum sativum</i>
	7	Capulin	<i>Prunus serotina</i>
	8	Cypress	<i>Cupressus lusitanica</i>
	9	Spinoso/Cardo Santo/Chicalote	<i>Argemone platyceras</i>
	10	Spur	<i>Delphinium grandiflorum</i>
		ur	
	11	Onion Flower	<i>Allium cepa</i>
	12	May Flower	<i>Zephyranthes minutes</i>
	13	Frijolillo	<i>Lupinus mexicanus</i>
	14	Lavender	<i>Lavandula</i>

		<i>angustifolia</i>
15	Rosa	<i>Rosa grandiflora</i>
16	Apple tree/apple tree	<i>Malus domestica</i>
17	Plumajillo	<i>Abies religiosa</i>
18	Nopal	<i>Opuntia ficus-indica</i>
19	Red Ocote	<i>Pinus patula</i>
20	Ocote	<i>Pinus montezumae</i>
21	Cedar	<i>Thuja</i> sp.
San Pedro	22	Horsetail
		<i>Equisetum</i> sp.
	23	Stork Garlic
		<i>Armeria arenaria</i>
	24	Trompetilla
		<i>Bouvardia ternifolia</i>

The findings support successful alignment with the specific and educational objectives of the project, highlighting the importance of selecting species that contribute to the educational experience in a meaningful way [16]. Consistency in data presentation for all species reflects suggested best practices to facilitate user understanding and maintain cohesion in the presentation of information [17]. Review of sources and confirmation of the scientific validity of the information support the idea of.

that the quality of the information is essential, alignment with the scientific literature establishes a solid basis for

the credibility of the virtual museum [18].

The evaluation of the regional relevance of the species is high and it is important to faithfully represent local biodiversity in virtual museum projects to maximize their educational value [19]. The gastronomy module contains information on typical dishes such as tlacoyos ahogados en salsa, flor de quito capeada, chayotextle capeado, and mushroom quesadillas. The culture module contains information about the most important festivities and the newspaper library contains digitally 100 newspapers and 100 magazines with historical information about the Magical Town of Zacatlan. Taken together, these results support the soundness of the project in the creation of a virtual museum of flora, fauna, gastronomy, culture and history. However, it is essential to recognize potential limitations and areas for future improvement, as possibility of expanding the species collection. The gastronomy module should add more typical dishes or incorporate interactive features to improve user participation [20].

CONCLUSIONS

The general objective of this project is to create a virtual museum of flora, fauna, gastronomy, culture, and culture.

history of the Magical Town of Zacatlan using Adobe Dreamweaver®, Adobe Animate®, in the period January-November 2024, providing visitors with an educational and enriching experience that allows them to explore and learn, showing interactive data sheets of each species. To achieve this general objective, specific objectives were established, ranging from the detailed planning of the structure and navigation of the virtual museum to the implementation of an attractive and coherent visual design. Three versions of interactive prototypes were developed. To assess usability, relevant and engaging multimedia content was generated, and interactive functionalities were implemented to enhance the user experience. The progress of the project followed that information and communication technologies (ICT) allow people to access information about certain cultural and natural heritage sites [21]. Virtual museums contain collections of artifacts and electronic resources that can be digitized and stored on a server. The project is scalable since it can include different categories of information and, in this way, contribute to Zacatlan's conservation of its designation as a magical town. In order to give continuity to the project, the following lines of work are envisioned: 1) Increase, standardize and automate the processes of gathering and curating information; 2) Develop and automate processes to elaborate and incorporate animations and virtual tours.

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ANNEXES

Annex 1. Collaboration agreement between the ITSSN and the Citizen Committee of the Magical Town of Zacatlan (period of getión: November 2021 to November 2024).



DECLARACIONES

1.- Del "TECNOLÓGICO"

- Que es un Organismo Público Descentralizado del Gobierno del Estado de Puebla, con personalidad jurídica y patrimonio propio, como lo señala el artículo 1 del Decreto del Ejecutivo del Estado, que crea el Instituto Tecnológico Superior de la Sierra Norte de Puebla, publicado en el Periódico Oficial de la entidad el veintinueve de noviembre de los noventa y cuatro, reformado el día diecisiete de diciembre de dos mil uno publicado en similar medio, cuyo objeto es impulsar e impartir educación de nivel superior.
- Tiene por objeto entre otras actividades y de acuerdo con lo preceptuado en el artículo 3 de su Ley, lo siguiente:
 - Ofrecer educación tecnológica de tipo superior que forme profesionistas, profesores, científicos e investigadores con un sentido humanístico e innovador que, incorporados a los avances científicos y tecnológicos, estén aptos para aplicar sus conocimientos a la solución creativa de problemas que se presentan en su región, contribuyendo al desarrollo municipal, estatal y nacional.
 - Realizar investigación científica y Tecnológica que permita el avance del conocimiento, el desarrollo de la enseñanza tecnológica y el mejor aprovechamiento social de los recursos naturales y materiales que contribuyen a elevar la calidad de vida de la comunidad.
 - Vincular los aprendizajes científicos y tecnológicos con los sectores público, social y privado para apoyar el desarrollo económico y productivo de la región y del Estado.
 - Cumplir con cualquier otro acto que permita consolidar su modelo educativo.
- Se encuentra debidamente inscrito ante la Secretaría de Hacienda y Crédito Público, bajo el Registro Federal de Contribuyentes: ITSSN1118384.
- Que la **Mra. Guadalupe Moreno Nava** en su carácter de **Directora General**, que demuestra con el nombramiento de fecha 21 de junio de 2022, asignado por el Doctor Melitón Lozano Pérez, Secretario de Educación Pública y Presidente de la Junta Directiva del Instituto Tecnológico Superior de la Sierra Norte de Puebla, tiene la facultad de firmar

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Annex 2. Collaboration agreement between the ITSSN and the Citizen Committee of the Magical Town of Zacatlan (period of validity: November 2021 to November 2024).



el presente Convenio, de acuerdo a lo dispuesto en los artículos 3 fracciones II, III, IV, 4 fracciones IV, V, IX, X, XI, XV, XVII y 11 fracciones I, II, XIX del Instrumento Jurídico anteriormente señalado.

5. Que tiene su domicilio en Avenida José Luis Martínez Vázquez, número 2050 en la Junta Auxiliar de Jocotlán, del Municipio de Zacatlán, Puebla, C.P. 73315 y números telefónicos 797 975 1684, 797 975 0839 y 797 975 0851, con correo electrónico direccion.general@zacatlan.tecnm.mx.

II.- Del "COMITÉ"

1. Que es un Organismo ciudadano con personalidad jurídica emanada de los Instrumentos correspondientes expedidos por la Secretaría de Turismo Federal para el programa denominado pueblos mágicos y patrimonio propio.

2. Tiene por objeto coadyuvar en la implementación de acciones necesarias para promover un desarrollo turístico equilibrado, fomentando el conocimiento, así como la atención, conservación, cuidado y revitalización del patrimonio cultural y natural del pueblo mágico; en el capítulo II del reglamento interno del comité pueblo mágico, se establece la naturaleza y objeto del mismo, y en su artículo 4 se señala: El Comité Pueblo Mágico, está integrado por diferentes actores de la sociedad civil que no desempeñan ningún cargo público, que son representantes del turismo y de una comunidad que tiene el Nombramiento de Pueblo Mágico.

3. Se encuentra debidamente inscrito ante la Secretaría de Hacienda y Crédito Público, bajo el Registro Federal de Contribuyentes: XAXXG10101000.

4. Que la **Profa. María Elena Muñoz Mejorada** en su carácter de **Presidenta**, tiene la capacidad y personalidad jurídica necesaria para la celebración del presente convenio, tal y como lo acredita el cargo que ostenta, mediante la Minuta de Reunión Extraordinaria del Comité Pueblo Mágico Zacatlán de las Manzanas, con fecha 23 de septiembre del año 2021.

5. Para los efectos del presente convenio, señala como su domicilio fiscal y físico el ubicado en Juan Cristóbal Borilla No. 132 Interior 2, Barrio de Maquitta, con Código Postal 73310, Zacatlán, Pue., con el número telefónico 797 107 67 21 y correo electrónico zacatlanepmcomite@gmail.com.

CLÁUSULAS

PRIMERA. - Objeto. El presente convenio tiene por objeto establecer las bases y mecanismos operativos para la coordinación, desarrollo y ejecución de programas, proyectos y acciones de vinculación que de manera asociativa más no limitativa se señalen a continuación: desarrollo tecnológico e investigación aplicada, asistencia técnica, asesoría, capacitación, residencia profesional, servicio social, elaboración de programas de interés común, por mencionar algunos.

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CONTRIBUTION ROLES

Role	Author(s)
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