

Cultural mapping is the term used to describe the set of activities and process for exploring, discovering, documenting, examining, analyzing, interpreting presenting, and sharing of information about communities, where they live and work, the things they do, and the things they produced or have produced (Cook & Taylor, 2013). One of its aim is to immortalize the cultural heritages of a certain community which are in danger of being erased from history due to various risks. UNESCO defines cultural heritage as “our legacy from the past, what we live with today, and what we pass on to future generations” (UNESCO).

The action to preserve cultural heritages or resources is important to sustain the value, meaning and significance of cultural resources from the past, for the use of the present and inspiration of future generations. The world is rapidly changing, with it comes the process development. However, the thrust to become a part of this developed world has the potential to create an atmosphere in which the cultural resources of a certain place are being put under the risk of demolition, damage, significant alteration or even destruction (Enriquez, 2015). In the Philippines, it is within the context of cultural confluence and confusion did cultural heritage mapping emerged because of some cases of heritage contestations some of which are the episode of the wrecking ball that pulverized the iconic Jai Alai building in Manila in 2000, the destruction of the Huluga Archaeological site in Cagayan de Oro and the road widening threats to historic towns of Silay (Negros Occidental), Baclayon (Bohol) and Carcar (Cebu) (Zerrudo, 2019). Because of these constant threats to the cultural resources and heritage, mapping or recording them has become valuable not only to reduce the risk of losing them but also to support the engagement of people. 6 | P a g e

Lanao del Sur forms the western portion of Northern Mindanao. It is bounded on the north by Lanao del Norte, on the east by Bukidnon, on the west by Illana Bay, and on the south by Maguindanao and Cotabato. It has a total of 40 municipalities and 1 city. The community has a vibrant culture and historic relics that must be preserved. On May 23, 2017, Marawi City fell under siege by militants affiliated with the Islamic State of Iraq and the Levant (ISIL). Not only were various heritage landmarks and sites were destroyed but also important priceless *pusaka* (heirloom) objects which are part of the community's cultural heritage and their history (Sembrano, 2017). Along with these *pusaka* objects, also lost are ancient documents written in Jawi, a pre-Spanish form of writing derived from the Arabic alphabet then prevalent in Malaysia, Indonesia and the Islamic areas of the Philippines. The documents record important events and occasions in the life of the Meranao people some of which were destroyed during the siege. Hence, digitation of such important cultural heritages is important to ensure its preservation. Conserving one's cultural identity is part of keeping the community intact.

### **1.1 Project Context**

This capstone entitled "A Geographic Information System Mapping for Tangible Cultural Heritage in Lanao del Sur" is a project focused on the development and implementation of a software that will automate the management and inventory of the cultural resources in Lanao del Sur.

The project is intended to establish a GIS-based mapping system of the heritages in LDS using the Leaflet Map API for interactive maps which provides different GIS functionalities. It will help the community and LGU of Lanao del Sur in the management and inventory of the

province's cultural resources. The system will allow heritages to be located on the map via their coordinates.

The project follows the Cultural Mapping Program of the National Commission for Culture and Arts (NCCA) made in response to the National Cultural Heritage Act of 2009 (RA 10066) to establish and maintain the Philippine Registry of Cultural Property (PRECUP). The said program is intended to assist Local Government Units (LGU) maintain an inventory of cultural properties under its jurisdiction. It is composed of six (6) phases- *scoping and negotiation, social preparation, training of the local teams, data gathering, data validation/reporting of draft profile, and finalized profile*. Thus, the data and workflow of the system will be based on the process or phases of the mapping program but is focused on the latter three (3) phases.

Under section 3, Article II of RA 10066, *Cultural Heritage* is defined as the totality of cultural property preserved and developed through time and passed on to posterity. Furthermore, in the NCCA's standard form, Tangible Cultural Heritages is categorized into *Movable* (archaeological, ethnographic, religious object, works of industrial/commercial arts, artwork, archival holding, national history specimen) and *Immovable* (government structures, private built structures, commercial establishments, schools and educational complexes, hospital and medical facilities, churches, temples and places of worship, monuments and markers, sites, and heritage houses/vernacular architecture).

It is believed that with the help of a software developed and designed based on the needs of the clients, the tasks will be simplified and thus make the LGU more effective in documenting the valuable resources of the province. Through this project, the proponents aim to eliminate the burden of keeping cultural records manually and make the information available to the community. 8 | Page

## 1.2 Purpose and Description

This project intends to develop a computerized management and inventory system to automate the recording and mapping of the cultural resources of the community for preservation, conservation, and community engagement to improve understanding within the community and strengthen their capacity to work together. Conservation of cultural heritage is very important because it provides a sense of identity and continuity in a fast-changing world for future generations.

Furthermore, this project aims to implement a mapping system that produce visual representation of the location of these resources. Thus, this project is greatly beneficial specifically to the following:

***Government (LGU).*** The Local Government Unit (LGU) can identify the distinct cultural resources of their community and at the same time can properly record a heritage resource for future reference. Eventually, they can develop or establish a heritage conservation council who shall lead in the conservation of the local cultural heritage as well as develop legislation, bills, and guidelines for safeguarding the cultural heritage of the community.

***Heritage Enthusiasts/ Researchers.*** Mappers or professionals any of whom may be able to provide information about the heritages. They can pass their research through the website and also browse other resources.

***Community.*** Provide the community awareness and support for conservation of cultural heritage. 9 |

### **1.3 Objectives**

This capstone project aims to develop a web-based management system for the tangible cultural heritage of the province of Lanao del Sur which will enable the community to identify their cultural resources for conservation and development.

Specifically, this project aims to:

1. Gather data relevant to mapping the tangible cultural resources in LDS.
2. Develop the system requirements or system specification based on the rules, roles, and activities.
3. Design the architecture of the system and its database.
4. Develop the system using the relevant tools and the designed architecture.
5. Test the functionalities of the implemented system and evaluate its usability.

### **1.4 Scope and Limitations**

This capstone project is focused on the development of a GIS-based mapping web application of the cultural resources of the province of Lanao del Sur. The main feature of the system is a map-based search to locate heritages with respect to its geographical location. Its scope includes only the implementation of the software based on the specified system requirements.

The existing workflow process of the cultural mapping program of NCCA is composed of six (6) phases. However, this project is focused only on relevant phases 4-6 which are data gathering, data validation, and finalized profile.

The scope of this project is limited only to the tangible movable and immovable cultural heritage resources identified in the province.