A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Master

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SUBJECT

Web Application for the Management and the Control of Associations and Clubs.

Case Study: Sub-Directorate of Scientific, cultural and sporting activities of the University of M'sila

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Thank you, my family,
Second there is people they don’t need invitation to my heart because they already in

Thank you, my Friends,

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Global Introduction
Introduction

About many years have passed since the computer has been introduced in the education system, and in the last years, a real conceptual revolution was generated in the education sector, the computer become a study environment for almost all the disciplines in school. After that, or maybe in the same time, the Internet has exploded, transforming itself into a global network. All the mediums, in which man is present, need a computer. It has begun with commerce, education, public administration, to extend itself to social networks (e.g. Facebook, Instagram, and Google+). The lack of education will certainly limit the access to those new technologies. Each of us must have an IT&C education in order to be able to live in the 21st century.

We have lots of clubs here in the university, including cultural, scientific and sports, but many students, if not all, do not know them or their activities and even the activities of the Directorate of the activities and their usefulness if not known to all students and know about their activities.

The goal of our project is to ensure continuity between students, clubs and the sub-department of activities where the student can see the activities organized by the clubs or Sub-Directorate.

The organization of this memory will be spread over three chapter. in the first chapter, we talk about electronic management systems and their importance in improving the level of administration and we also talk about Sub-Directorate of Cultural, Scientific and sporting activities.

The Second chapter will concentrate the conception of our information system that we will model with the UML language.

In the last chapter, we will detail the conception and testing of our application, and we will present the results, where we will explain the implementation.

Finally, we conclude this work by a general conclusion, perspectives and we will mention the principal difficulties encountered.
CHAPTER 1
ELECTRONIC MANAGEMENT AND
SUB-DIRECTORATE
OF ACTIVITIES
1. **Electronic management**

1.1. **Introduction**

E-management is an integrated electronic system aimed at transforming the normal administrative work from manual management to computer-based management, relying on strong information systems that help in making administrative decision as soon as possible at the lowest costs. Electronic management can include both internal and external communications of any organization. The aim is to introduce full transparency and accountability, leading to improved electronic management within an organization.

This initiative specifically targets government organizations, where public accountability is of particular concern. Similar operations are being developed in many US companies to help comply with Sarbanes Oxley's law.

Implementation of any electronic management solution should meet the needs of customers more centrally than a central organization, the reliance on specific individuals should be removed, and transparency systems should be introduced into the work. Examples of electronic management include online schedules and expense account. These can be used to help reduce costs for an organization.

1.2. **Transition from traditional management to e-management**

In order to shift from traditional management to e-governance, the following stages must be achieved:

- Automate state institutions and transfer all government information and paperwork to electronic information.
- Provide the necessary infrastructure to connect all state institutions with a single information network and exchange of information between different agencies.
- Identify all transactions between the citizen and each institution and convert them into electronic transactions.

1.3. **Objectives of electronic management**

- Development of public administration: reduction of paperwork and reuse of solutions.
- Improved services: reduced mobility, connectivity anytime, anywhere, and easy access to information.
- Proximity of students (employees): one interface for the student (employee), one look
for student (employee), and easy procedures.

- Improving economic competitiveness: the use of the Internet for global trade, and the opportunity for medium and small enterprises to enter the competition.
- Reduce expenses: systems integration to support internal and external procedures.

1.4. Electronic Management Requirements

- A strong, fast and secure infrastructure.
- Strong information architecture (robust and compatible information systems)
- A human cadre of investment trained in the use of modern technologies.
- A human cadre capable of carrying out continuous technical support and developing various information systems.

1.5. Benefits of e-management

- Speed in completion of work.
- Helping to make a decision to provide permanent information to decision-makers.
- Reduce administrative costs while raising performance.
- Overcoming the geographical and temporal problem.
- Addressing bureaucracy and bribery.
- Developing the mechanism of action and keeping abreast of developments.
- Raise the efficiency of the employees in the administration.

1.6. Obstacles of electronic management

- Fear of change.
- Overlapping responsibilities and poor coordination.
- Absence of appropriate legislation.
- Lack of funds.
- Lack of public awareness of the desired features.
- Lack of transparency and influence of special interest groups.
- Lack of adequate means of communication.
  Internet access barriers such as high cost and English.

1.6.1. Problems in the application of electronic management in the Arab world:

- Many governments have not changed their monastic procedures even with the introduction of computers.
• There is a big difference between a beautiful Web site and integrated services that end complex bureaucratic procedures.
• Financial and administrative bodies act as if they have nothing to do with one another.
• Attention to citizens and private sector was not the focal point in government sites.
• Even the best management programs did not provide the required support or full support.
• Even at the level of Arab countries, most often do not realize the importance of protection and information security and technical requirements for the performance of their programs and systems and sites on the Internet so it seems lean easy to penetrate.

1.7. The importance of applying electronic management

E-governance helps traditional organizations to switch to e-organizations. E-governance requires:

1   Electronic vision:
    This vision helps to visualize the future status of the e-organization.

2   Support senior management:
    Management should provide the e-governance team with the necessary support for implementation.

3   Plans of communication with the relevant authorities:
    This requires examining the needs and desires of the beneficiaries of the system, supporting the technical capabilities of the providers of electronic management services, and studying the detailed procedures for the performance of the electronic management services.

1.8. Electronic management techniques and systems

Some electronic management techniques:

- Web Services.
- Mobile.
- Electronic Document Management.
- Customer Relationship Management.
- Management Intelligence.
- Archives.
- Production management.
Chapter I – E-management and Sub-Directorate of Activities

- Assessing performance.
- Collaboration of corporate programs.
- The network.
- Planning.

There are many systems needed for electronic management:
- Instant monitoring systems and electronic procurement systems.
- Integrated Service Systems.
- Large data handling systems.
- Expert systems and smart. [1]

2. Sub-Directorate of Cultural

2.1. The definition

The Sub-Directorate of Activities is a structure of the University's Secretariat, containing two interests:
- The Department of Scientific and Cultural Activities
- Sports Activities Department

2.2. The role of the Directorate

Is a space for training and development of students' knowledge, and provide them with scientific capabilities appropriate to the needs of the ocean, so as to explode their energies to contribute to the comprehensive development of the country, in addition to being an outlet for university users.

For this purpose, the Directorate undertakes the implementation of a work program that includes the organization of annual activities, which is detailed below:

- **Scientific activity:**
  Which is part of the scientific composition of the student, in order to improve its level and expand its horizons and experiences?

- **Cultural activity:**
  It represents the heart of the pedagogical process and the essence of the scientific intellectual activities through which the student is informed about the various sciences and knowledge outside his field of specialization, especially those related to the arts, the discovery
Chapter I – E-management and Sub-Directorate of Activities

of national and international heritage and the friction with society.

- **Sports activity:**
  
  This activity is the real breathing of the student, but the fertile area through which the student expresses his physical and intellectual abilities, considering that the body is sound in the right mind.

- **Awareness and awareness activity:**
  
  This activity is mainly aimed at developing the sense of citizenship and promoting the social awareness of the student by involving him raising awareness of responsibility in interaction with the outside world.

  And to activate programs of activities at the university level, and within the framework of improvement and the revitalization of the university life carried out by the Directorate of Activities to prepare an annual program in line with religious and national holidays, where:

  - Activating the annual program of activities in order to create an atmosphere of science, culture and sports for students.

  - Facilitate the activities of student organizations and active clubs in the university and approved by the authorities, through Customize spaces to stay Their activities (lecture hall and exhibition halls) and the supervision of such activities through financial support (feeding, Accommodation, Etc.) and moral.

  - Facilitate the establishment of scientific and cultural clubs and sports for the benefit of students at the university level through the granting of accreditation by the university rather than local groups, not to mention the supervision of the combined mechanisms of general, and the coordination and organization of the programs carried out.

  - Implementation of the programs of the Ministry of the will, where she oversaw the organization of local qualifiers, state and a regional group for various sports, as well as framing the delegations participating from the universities of the homeland in various events programmed by the ministry.

  - Reviving university sport through the formation of collective and individual sports teams in different sports. This is all part of improving the student life in the university.

  - Work on the discovery of the talents of university students, whether scientific, cultural, sports and work to ensure the success of the activities are generally large and the South as students of foreign students.... etc.

  - Supervising the media coverage of all scientific, cultural and sports events inside and
outside the university. This work is classified as part of the media openness of the university to the outer perimeter. Through her website and email as well as social networking sites.

- The Directorate also participated in the organization of various scientific meetings, study days and seminars organized by the scientific laboratories, colleges and institutes in their various departments.

- The Sub-Directorate of activities is conducted according to programmed goals of a cultural, scientific and sports nature to improve the image of the university at the internal and external levels.

2.3. Types of clubs

- Scientific Clubs
- Cultural clubs
- Sports clubs

There may be scientific and cultural clubs.

The influence of clubs on the pedagogic side of the student:

The same objectives adopted by the Sub-Directorate of activities of each club according to its activity, sports cultural science.

3. Conclusion

In this part we defined the problematic and the objective of our work, by change the Sub-Directorate of Activities to E-Administration and specifying the functional and nonfunctional needs for the creation of our application. In the following chapter we will begin the analysis of needs by defining the different actors of the system, as well as the different diagrams.
CHAPTER 2

SYSTEM ANALYSIS AND DESIGN
1. Introduction

This chapter presents a study of what exists and lists the objectives to be attained in a first place. Subsequently we expose a modeling of the projected architecture based on the UML language in order to define the architecture to be implemented and the appropriate tools.

Engineers in other disciplines have long used blueprints and models to design and construct complex systems. They are concise, precise and allow the viewer to understand at a glance what is going on. Not so anymore. The Unified Modelling Language (UML) is a standard widely adopted graphical language that describes the artefacts of software systems with a focus on conceptual and physical representations. It provides a good bird's eye view as well as the minute details of the structural and behavioral aspects of a single system through the various views offered by UML.

2. UML (Unified Modeling Language)

The OMG specification states: "The Unified Modeling Language (UML) is a graphical language for visualizing, specifying, constructing, and documenting the artifacts of a software intensive system. The UML offers a standard way to write a system's blueprints, including conceptual things such as business processes and system functions as ‘well as I concrete things such as programming language statements, database schemas, and reusable software components.’"[2]

2.1. Overview of UML diagrams

A model is a simplified representation of a problem. UML allows to express the object models through a set of diagrams. The latter are Means of description of the objects as well as the links that connect them.

2.2. UML Utility

UML used to specify, view, modify and construct the documents necessary for the good development of an object-oriented software. UML offers a modeling standard. To represent the software architecture. The different elements that can represented by:

- Activity of an object / software
- Actors
- Process
- Database schema

---

11
- Software components
- Reuse of components

To model our project, we will use three diagrams, which are:

- Use Case Diagram
- Class diagram
- Sequence diagram

2.3. UML diagrams

UML has many types of diagrams, which are divided into two categories. Some types represent structural information, and the rest represent general types of behavior, including a few that represent different aspects of interactions. These diagrams can be categorized hierarchically as shown in the following class diagram.

![Figure 2.1: UML Diagrams [3]](image)
2.4. Use case diagram

Use case illustrates a unit of functionality provided by the system. The main purpose of the use-case diagram is to help development teams visualize the functional requirements of a system, including the relationship of "actors" (human beings who will interact with the system) to essential processes, as well as the relationships among different use cases. Use-case diagrams generally show groups of use cases either all use cases for the complete system, or a breakout of a particular group of use cases with related functionality (e.g., all security administration-related use cases). To show a use case on a use-case diagram, you draw an oval in the middle of the diagram and put the name of the use case in the center of, or below, the oval. To draw an actor (indicating a system user) on a use-case diagram, you draw a stick person to the left or right of your diagram (and just in case you are wondering, some people draw prettier stick people than others). Use simple lines to depict relationships between actors and use cases. [3]

- **Admin**
  Admin can do After Login process the following function:
  - Clubs management (Add/Modify/Delete).
  - Contact with clubs.
  - Advertising Management (Add/Modify/Delete).
  - Club members (Student) management (Add/Modify/Delete).

![UseCaseAdmin](image-url)

**Figure 2.2:** Administrator use case diagram
• **Club member**

The Club member can do After Login process the following function:

- Club advertising management (Add/Modify/Delete).
- View advertising.
- View clubs’ detail.
- Contact with administration and clubs

![Club member use case diagram](image)

**Figure 2.3:** Club member use case diagram

• **Student**

Student can do following function:

- View advertising.
- View clubs’ detail.
- Contact with administration and clubs.
- Send a request to join in the club.
- Download Club Basic Code.
• **Global use case diagram**
  
The global use case diagram represents the different functions of our application around which the needs and requirements of the various actors who will interact within the system are set up.
Chapter II – System Analysis and Design

Figure 2.5: General use case diagram

2.5. class diagram

The class diagram shows how the different entities (people, things, and data) relate to each other; in other words, it shows the static structures of the system. A class diagram can be used to display logical classes, which are typically the kinds of things the business people in an organization talk about rock bands, CDs, radio play; or loans, home mortgages, car loans,
interest rates. Class diagrams can also be used to show implementation classes, which are the things that programmers typically deal with. An implementation class diagram will probably show some of the same classes as the logical class’s diagram. The implementation class diagram won’t be drawn with the same attributes, however, because it will most likely have references to things like Vectors and Hash Maps. [3]

Class is depicted on the class diagram as a rectangle with three horizontal sections, as shown in next Figure, the upper section shows the class’s name; the middle section contains the class’s attributes; and the lower section contains the class’s operations (or "methods"). [3]
2.6. Sequence diagrams

Sequence diagrams show a detailed flow for a specific use case or even just part of a specific use case. They are almost self-explanatory; they show the calls between the different objects in their sequence and can show, at a detailed level, different calls to different objects.

Sequence diagram has two dimensions: The vertical dimension shows the sequence of messages/calls in the time order that they occur; the horizontal dimension shows the object instances to which the messages are sent. [3]

➢ Login sequence diagram

When the user (Admin, Club manager) want to access our web application, he will be forced to login before accessing it by entering his username and password, after entering the system sends a request to the server to process the sent information, if the information is correct the user will access his dashboard otherwise an error message will be displayed and will return the user to the login page.

![Login sequence diagram]

Figure 2.7: Login sequence diagram
➢ Club management
  - After login from admin he can add club

![Sequence diagram for adding a club](image1)

**Figure 2.8:** Sequence diagram add club

- After login from admin he can delete club

![Sequence diagram for deleting a club](image2)

**Figure 2.9:** Sequence diagram delete club
➢ Add adverts
  - After login admin or club manager can add ads

![Add ads sequence diagram](image)

**Figure 2.10:** Add ads sequence diagram

➢ Download Basic Law for Clubs
  - Any student can download the Basic Law of the clubs from the site if he wants to establish a club

![Download Basic low sequence diagram](image)

**Figure 2.11:** Download Basic low sequence diagram.
3. **Conclusion**

In this chapter, we followed a modeling process to develop our application, based on the UML language.
CHAPTER 3
IMPLEMENTATION AND REALIZATION
1. Introduction

In this chapter dedicated to technical study and implementation, we have started to define the tools to develop to use for the implementation of our application. We used Web technologies like HTML, CSS3, JavaScript, PHP and MySQL in design and web application and to connect the application with the server. We used other techniques such as: AJAX to take advantage of updating the information on the web page at the real time, without reloading the page. Then we will go to the presentation of our application and we will finish with a conclusion.

2. Web application

A web application refers to an application software hosted on a server and accessible via a web browser. Unlike other applications, the user of a web application does not need to install it on their computer. All you need to do is connect to the application using your browser. [4]

2.1. Benefits

- Web applications run "inside" a browser; no complex installation is needed.
- Web applications require very little disk space (or computing power) on the client. All the client does is display the data.
- Web applications solve some of the "compatibility issues" (Windows, Mac, Linux); all that is needed is a browser.
- In many cases, the data is stored remotely too. As with other cloud computing, this can allow easy communication and cooperation.
- Help for communication and mail.[4]

2.2. Drawbacks

- Because they run inside a web browser, most web applications "look" very different to regular programs. The user experience or ease of use is different and some may dislike it.
- Web applications need to be coded so they follow standards. Any browser that also follows the standard can be used. Small changes in a given browser's implementation of a standard may prevent that browser from using the web application.
- Web applications need a connection to the server where the application runs, all the time. The connection may need a certain bandwidth. Without an adequate connection, the application may not become usable; in the worst case, data may be lost.
- Many applications are dependent on the server that hosts them. When the server is switched off, or the company goes bust, the application is no longer usable. Traditional
applications continue to work.

- The company offering the web application has complete control over it. This also means that they may launch a new version when they want to; the option to "skip" a less popular version does not exist.

- In many cases, the data is stored remotely too. It may not be possible to export the data so that it can be used with another application.

- The company can theoretically track anything the users do. This can cause privacy problems.[4]

3. Development tools

3.1. Development of diagrams

To realize the UML diagrams that were used to model our web application, we used a diagram development software and web application:

- **StarUML** is a sophisticated software modeler aimed to support agile and concise modeling.

![Figure 3.1: StarUML software interface.](image-url)
3.2. NetBeans

NetBeans is an integrated development environment (IDE) for Java. NetBeans allows applications to be developed from a set of modular software components called modules. NetBeans runs on Windows, macOS, Linux and Solaris. In addition to Java development, it has extensions for other languages like PHP, C, C++, HTML5, and JavaScript.[6]

![NetBeans software interface](image)

**Figure 3.2:** NetBeans software interface [6]

3.3. phpMyAdmin

phpMyAdmin is a free software tool written in PHP, intended to handle the administration of MySQL over the Web. phpMyAdmin supports a wide range of operations on MySQL and MariaDB. Frequently used operations (managing databases, tables, columns, relations, indexes, users, permissions, etc.) can be performed via the user interface, while you still have the ability to directly execute any SQL statement.[7]

![phpMyAdmin logo](image)

**Figure 3.3:** PhpMyAdmin logo
3.4. MySQL

MySQL is a free relational database that started in 1995 and is widely used on the Web, often in combination with PHP (language) and Apache (web server). MySQL works equally on all operating systems (Windows, Linux, Mac OS in particular). The principle of a relational database is to store information in tables that represent groupings of data by subject (product table, user table for example). The tables are linked together by relations.[8]

![MySQL logo](image)

Figure 3.4: MySQL logo

3.5. XAMPP

XAMPP is a software package that makes it easy to set up a Web server and an FTP server. It is a free software distribution (X Apache MySQL Perl PHP) offering a good flexibility of use, famous for its simple and fast installation. Thus, it is within the reach of a large number of people since it does not require any particular knowledge and, moreover, works on the most widespread operating systems.[9]

![XAMPP logo](image)

Figure 3.5: XAMPP logo

This "distribution" will therefore be responsible for installing all the tools you may need when creating a website. More than a dozen utilities are integrated, such as MySQL, PHP, Perl or phpMyAdmin. It is distributed with different software libraries that extend the range of services significantly: OpenSSL, Expat (XML parser), PNG, SQLite, ... and various modules Perl and Tomcat, FileZilla Server.[9]
3.6. Google Chrome

Google Chrome (commonly known simply as Chrome) is a cross-platform web browser developed by Google. It was first released in 2008 for Microsoft Windows, and was later ported to Linux, macOS, iOS, and Android. The browser is also the main component of Chrome OS, where it serves as the platform for web apps.[10]

3.7. programming languages

3.8. HTML

Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript, it forms a triad of cornerstone technologies for the World Wide Web.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.[11]

Figure 3.6: HTML logo

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as `<img />` and `<input />` directly introduce content
into the page. Other tags such as `<p>` surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags, but use them to interpret the content of the page.[11]

3.9. CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language like HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

Figure 3.7: CSS logo

CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate `.css` file, and reduce complexity and repetition in the structural content.[12]

- **Bootstrap**

  Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains CSS- and (optionally) JavaScript-based design templates for typography, forms, buttons, navigation and other interface components.

3.10. JavaScript

JavaScript often abbreviated as JS, is a high-level, interpreted programming language that conforms to the ECMAScript specification. JavaScript has curly-bracket syntax, dynamic
typing, prototype-based object-orientation, and first-class functions. Alongside HTML and CSS, JavaScript is one of the core technologies of the World Wide Web. JavaScript enables interactive web pages and is an essential part of web applications. The vast majority of websites use it, and major web browsers have a dedicated JavaScript engine to execute it.[13]

![JavaScript Logo](image)

**Figure 3.8:** JavaScript logo

As a multi-paradigm language, JavaScript supports event-driven, functional, and imperative (including object-oriented and prototype-based) programming styles. It has APIs for working with text, arrays, dates, regular expressions, and the DOM, but the language itself does not include any I/O, such as networking, storage, or graphics facilities. It relies upon the host environment in which it is embedded to provide these features.

Initially only implemented client-side in web browsers, JavaScript engines are now embedded in many other types of host software, including server-side in web servers and databases, and in non-web programs such as word processors and PDF software, and in runtime environments that make JavaScript available for writing mobile and desktop applications, including desktop widgets.[13]

3.10.1. *jQuery*

![jQuery Logo](image)

**Figure 3.9:** jQuery Logo

jQuery is a JavaScript library that allows web developers to add extra functionality to their websites. It is open source and provided for free under the MIT license. In recent years, jQuery has become the most popular JavaScript library used in web development.[14]
3.11. AJAX

Ajax (short for asynchronous JavaScript and XML) is a set of web development techniques using many web technologies on the client side to create asynchronous web applications. With Ajax, web applications can send and retrieve data from a server asynchronously (in the background) without interfering with the display and behavior of the existing page. By decoupling the data interchange layer from the presentation layer, Ajax allows web pages and to change content dynamically without the need to reload the entire page. [15]

3.12. PHP

PHP is an HTML-embedded Web scripting language. This means PHP code can be inserted into the HTML of a Web page. When a PHP page is accessed, the PHP code is read or "parsed" by the server the page resides on. The output from the PHP functions on the page are typically returned as HTML code, which can be read by the browser. Because the PHP code is transformed into HTML before the page is loaded, users cannot view the PHP code on a page. This make PHP pages secure enough to access databases and other secure information. [16]

3.13. SQL

SQL (Structured Query Language) is a domain-specific language used in programming and designed for managing data held in a relational database management system (RDBMS), or for stream processing in a relational data stream management system (RDSMS). It is particularly useful in handling structured data where there are relations between different entities/variables of the data. SQL offers two main advantages over older read/write APIs like ISAM or VSAM. First, it introduced the concept of accessing many records with one single command; and second, it eliminates the need to specify how to reach a record, e.g. with or without an index.

Originally based upon relational algebra and tuple relational calculus, SQL consists of many
types of statements, the scope of SQL includes data query, data manipulation (insert, update and delete), data definition (schema creation and modification), and data access control.[17]

4. Security

Computer security is the set of technical, organizational, legal and human resources needed and put in place to maintain, restore, and guarantee the security of computer systems. It is intrinsically linked to the security of information and systems.

4.1. At the level of our site:
- a password for each user.
- Also, the password of each user is encrypted by private key.
- We using function of PHP and the queries prepare, this type of query and more secure and it is effective against SQL Injection.

5. Presentation of the system

In the following section, we will present snapshots of the most important pages of our managing web application in relation

5.1. Website

Our website (Sub-Directorate of Activities) is dynamic with a back office or dashboard designed for the administration. From this board you can configure all the tasks and determine the settings of the Sub-Directorate such:

- Number of clubs.
- advertisement making.
- Planning and timetable…. etc.

Figure 3.13: Website/App logo
5.2. Website interface

in the interface we define the site and its content and statistic about activities and clubs

Figure 3.14: Website interface
5.3. Clubs page

On the clubs' page, the student can see the clubs in the university with the possibility of classifying them according to the type of activity of each club or search with club's name and by click on the club gets more details in addition to that the student can download the basic law to establish a new club.

Figure 3.15: Clubs' page

5.4. Club details page

On this page we have more details about the specific club, the date of its establishment, its objectives, its pursuit and the type of its activities, and we also have details about its members, their ranks, the address of each member and the club and we also have announcements about the activities of the club and by clicking on an ad Find more details about the activity and can also The student can send a request to join the club.
Figure 3.16: Club details page
5.5. Advertising page

On this page we offer advertisements about the activities of clubs and Sub-Directorate of Activities, where the student can see the latest advertisements on the site and by clicking on Read more we go to more details about the advertisement.

Figure 3.17: Advertising page
5.6. Ad Details page

After clicking on the ad, we bring you to this page where you will find more details and pictures about the activity.

Figure 3.18: Ad Details page
5.7. Contact page

Anybody can contact with Sub-Directorate of Activities, by know them place or send them an email.

![Contact page](image)

**Figure 3.19:** Contact page

5.8. Login Form

Our application is dynamic where any club manager or Sub-Directorate manager can sign in from the name and the password we can detect if user is Sub-Directorate manager or club manager
After logging in the site pages turn to a control panel where icons appear to enable the manager to change the content

5.9. Clubs management

The manager of the Sub-Directorate of activities can add, modify or delete a club

Figure 3.20: Login page

Figure 3.21: Clubs management page
5.10. Add club form

A club will be added after filling the inputs and pressing Add.

![Add club form](image)

Figure 3.22: Add club form

5.11. Club Management

After the selection of the club by the director of the Sub-Directorate of activities show him the club page where he can add or delete or modify the club's prefect or choose the club manager.

![Club management page](image)

Figure 3.23: Club management page
5.12. Advertising Management

The manager of the Sub-Directorate of activities can add, modify or delete an advertising.

Figure 3.24: Ads management page
5.13. Club Manager page

After login from the club manager, we take him to his club page where he can modify the content, add or delete an ad for an activity.

Figure 3.25: Club manager page
6. Conclusion

So far, we have presented the essential of our work. We have started by introducing UML modeling and the principal diagrams for the website. Also, we have explained in details the most important tasks of our website of management and highlighted the important characteristics of it: it can be used by any student. This is due to the dynamic creation of the databases and the automatic generation of the website pages.
Conclusion

Our project is divided into the development of the Sub-Directorate of cultural, scientific and sports activities from ordinary management to electronic management. The establishment of a website that allows the Directorate of Activities to be run in terms of advertisements, clubs and advertisements. Where the arrival of each new from the Directorate or from the clubs to the students at the university and provide information of all clubs available from their activities and their location and contact them to participate in any activity in addition to contact the Directorate to inquire and learn more about the activity.

We hope in the future that the system can be expanded and made available to all universities of the Algerian homeland so that all clubs and sub-directorates of activities are connected with each other and form external links.
Bibliography

Website:
Abstract:
The work undertaken in this thesis focuses on the need to apply electronic management in the Sub-Directorate for scientific, cultural and sports activities. In order to get the best communication between the students, the directorate and the clubs. In this context, we have established a system linking the Directorate and the students. To publish any activity or information by the Directorate or by the clubs to be visible to each student or user of the site.

Key words: Electronic administration, Sub-Directorate of activities, website, clubs, activities

Résumé :
Le travail entrepris dans cette thèse porte sur la nécessité d'appliquer la gestion électronique dans la sous-direction des activités scientifiques, culturelles et sportives de l’université de M’sila. L’objectif de ce travail est de permettre la gestion à distance de cette sous-direction avec tous les clubs inclus et d'obtenir une meilleure communication entre les étudiants avec leur direction et leurs clubs.

Mots clé : Administration électronique, sous-direction des activités, site web, Clubs, activités