Mu.SA
museum sector alliance

Introduction to documentation

Theodor Panagiotakopoulos, Hellenic Open University

Aim and objectives

- This presentation introduces learners to documentation, describing **basic terms** and **concepts**, as well as the **documentation specialist** job profile. It also presents various **documentation components**.

- The **objectives** of this presentation are to:
  - Define documentation and highlight its importance
  - Describe the features of a good documentation
  - Display main responsibilities and required skillset of documentation specialists
  - Discuss available documentation components

- At the end of this presentation, you will be able to:
  - Outline the two major achievements of a good documentation
  - Describe four skills of a documentation specialist
  - Choose appropriate documentation components to address specific needs

Table of contents

- Section 1 <Terms and concepts>
- Section 2 <Documentation specialist>
- Section 3 <Documentation components>

Terms and concepts

Co-funded by the
Erasmus+ Programme
of the European Union

➢ In the **real world**, when we buy a phone, or a microwave or a washing machine, it comes with a user guide

➢ In the **digital world**, when we purchase a software, an application, or a game, again, some type of electronic guide accompanies them to describe their functionality

Source: https://www.123rf.com

➢ Without these documents, we'll have to learn how to use the product leveraging solely on the '**trial and error**' method

Co-funded by the
Erasmus+ Programme
of the European Union

What is documentation?

➢ Documentation is literally the **preparation** (production) of documents, **or keeping records**

➢ Its main **purpose** is to describe the use, operation, maintenance, or design of software or hardware products

➢ It can be **paper-based** (hard-copied) and **electronic** (digital)

➢ Electronic documentation can be either online, or on **digital or analog media**, such as audio tapes, CDs and DVDs

➢ **Documentation examples** are user guides, white papers, on-line help, Frequently Asked Questions (FAQ), quick-reference guides and video tutorials

Three steps to success

Creating great product

- First and foremost, you need to have something useful and valuable to propose to the people out there. It can be a product, an application or a service, but in either case it must be of great quality.

Writing great documentation

- The second step is to write documentation for your product or service.
- Just like a map for a tourist place

Offering great support

- Lastly, you need to offer genuine support for your product or service.
- Even a map will not show you some "secret" places that a native can reveal

Magic formula

Great product + **Great documentation** + **Great Support** = **Great success**
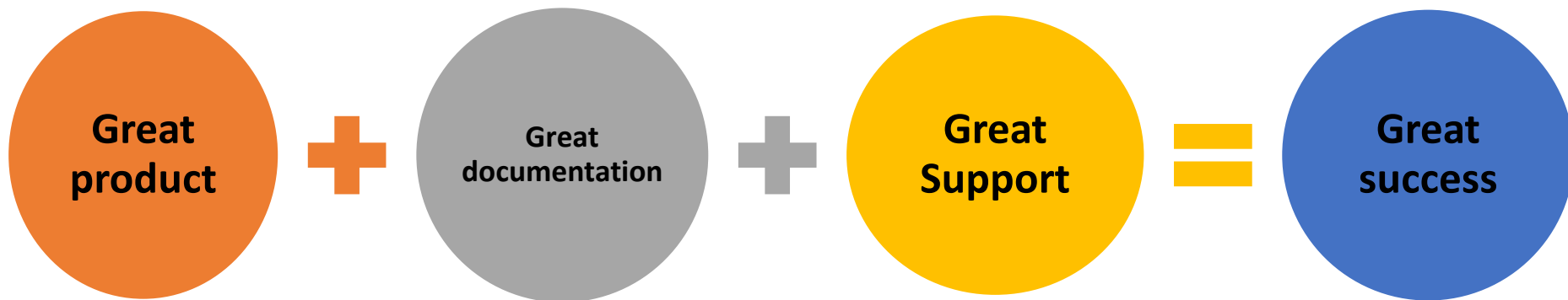
Why documentation is needed?

➢ Documentation is an extremely important part of many industries like **highly regulated industries** (e.g. pharmaceutical)

➢ It is the way that companies can show that they are **complying** with the regulations

➢ Essential for the **successful manufacture of safe products**

➢ Acts as a **stable reference point** to ensure that personnel across all departments and all shifts are following the same protocols

➢ Makes sure that actions are recorded with a specific **note of times and dates**

➤ **Good documentation achieves two important things**:

  ▪ It **adds value** to a product. A well-documented product is always preferred to that with poor documentation; because it's more complete, easier to use, and thus, far more useful.

  ▪ It **reduces the need of support**, because the more complete your documentation is, the less likely is users to have issues with your product.

➤ As a result, a well-written documentation can increase a company's **reputation** by keeping people satisfied with using its products.

Poor documentation

- If I am a user and see that your product's documentation is **bad**, what will you think of?

- If you **don't care** about your own product, why should I?

- I will **switch** to someone else's product — someone who cares enough to try to create a pleasant user experience for me

- The natural conclusion of the above is, if users see that you **respect** them, then they, in their turn, will respect you.

- What is it that differentiates a professional from an amateur is their **attention to the detail**. Providing a good documentation is one such detail.

➢ **Good documentation must be**:

- ■ **Complete**. Documentation for every feature and every aspect of a product, so that it can be used fully and properly.

- ■ **Concise**. The product documentation must be written in such a way which removes all redundant things.

- ■ **Organized**. Randomly collected tutorials and resources – from here and there – cannot provide a systematical, logical, clear, and easy to follow guidance.

- ■ **Up-to-date**. Actual documentation for the most recent version of their product. Not the first version a product was disposed.

➢ **Good documentation does several things**:

- It tells a product's **definition** and **purpose**

- It tells the difference from other similar products and what makes it **unique**

- It tells users how to **get started** with the product

- It tells users how the product can be used in **real world projects**

- It tells the product's **best practices**

- It gives plenty of **examples** and **demos** for the product's uses.

Documentation specialist

Who is responsible for documentation?

➢ At an **individual level** and several **small/medium sized enterprises** small the creator does the documentation

➢ In most **medium and all large enterprises**, documentation is undertaken by documentation specialists

➢ Typically sit as a role within the **quality department**

➢ A **Documentation Specialist** is an individual responsible for the writing, distribution, collection, storage, and maintenance of this documentation.

➢ They can be **responsible for** implementing new storage systems or working to optimize the efficiency of the system already in place.

Typical tasks

➢ **Creates documentation** that meets the regulatory requirements

➢ **Working closely with colleagues** across other departments to assure proper acquisition of the necessary documentation

➢ Acting as a **point of contact** for retrieval of specific documentation

➢ **Keeps up-to-date** with the regulatory requirements

➢ Deal with **long-term storage** of information and data protection

➢ Participation in internal **audits** and external **regulatory inspections**

➢ **Analysis of data**

➢ Compilation of **reports**

➢ **Training** of colleagues

➢ **Revising** outdated documents

Source:
https://www.lifewire.com

Required skills

- **Organizational skills** – need to ensure that all company employees are provided with (and are using) the most recent version of documentation

- **IT skills** – an increasing number of documents are kept digitally. Even those based on paper will have a digital counterpart or mapping

- **Written communication skills** – when writing new documentation or update existing documents, instructions must be clear to all

- **Attention to detail** – again, to ensure that all staff are clear on what they are required to do, the smallest details of documentation must be clear.

- **Team working** – role in coordinating other staff members

Documentation components

Co-funded by the
Erasmus+ Programme
of the European Union

Getting started section – One of the first things you must do in your documentation is to provide an adequate answer to the user's question: 'How to get started?'.

Source: https://support.appsflyer.com

User guide/manual – It's a type of documentation which gives users comprehensive information on how a particular product can be and/or must be used. They are goal-oriented including a series of steps and showing how to solve particular problems.

Source: https://stepshot.net

Examples/Demos – This is an extremely important component. One shown example is better than thousand said instructions. So, the main principle here is: show, don't tell.


Source: https://www.forescout.com/demo/

Code playground – This component offers a ready-to-go environment where users can start toying with your product immediately. It's great for quickly trying things out. This is important because, for novice users setting their own working environment can be a bit tedious.

Source: http://toworkorplay.com

Slide presentations – Slides are an elegant, concise, and easy to follow method for explaining a topic, or a concept.
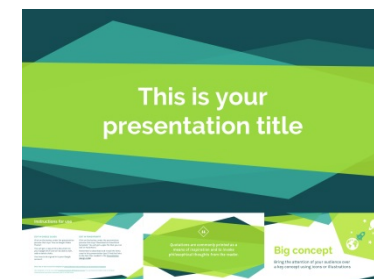
Tutorials – These are one of the widely used and effective ways for teaching. You may think of them as short guides/manuals focused on more narrowed topics. They are learning-oriented.

Screencasts – Some people prefer video instructions instead of written ones. For them you can offer video tutorials through recordings that capture actions taking place on a computer display, often containing voice-over narration.

Source: https://www.bandicam.com

Cookbooks – These are especially useful when you need to provide solutions to particular or common problems. The Cookbook Method is the process of learning a programming language by building up a repository of small programs that implement specific programming concepts.
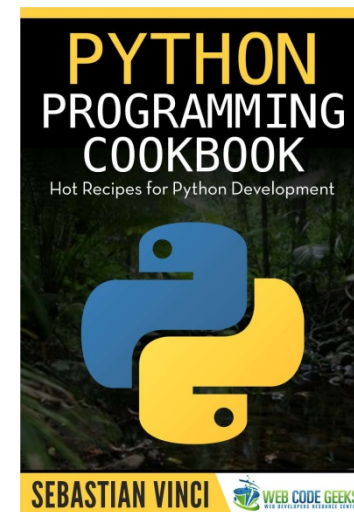
API reference – This *solely* can't be described as true documentation, but yet it's an important part of it. It's a concise reference manual containing all the information required to work with the Application Programming Interface (API) of your product/software, with details about the functions, classes, return types, arguments and more.

Source: https://barandbench.com

Frequently Asked Questions (FAQs) – Listed questions and answers pertaining to particular topics, all supposed to be commonly asked. They can save huge amounts of user support effort.

System requirements – They provide the (minimum and recommended) computer specifications for a software product to operate.

Change logs/Release notes – Seeing the path of your product, from its conception to its recent implementation, can be very useful to users especially in the process of keeping it up to date.

Source: https://www.iconfinder.com
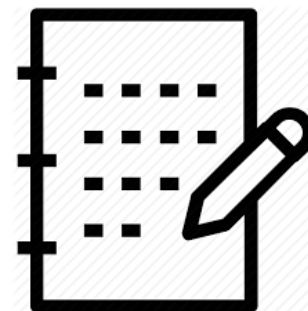
License information – This component tells users where they can use your product and under what conditions.

Co-funded by the
Erasmus+ Programme
of the European Union

- A **great product is not enough** for success

- Providing a great **documentation** is **crucial**

- Any self-respecting individual or enterprise should prove its **professionalism** by providing a **good enough documentation** of its products

- There exist **various components** to consider in documenting a product

- All the extra documentation efforts give a competitive advantage that will **return the investment** on a good documentation

List of references

- https://www.getreskilled.com/what-is-a-documentation-specialist/

- https://dev.to/eli/3-essential-components-of-great-documentation-2cih

- https://www.oreilly.com/ideas/the-eight-rules-of-good-documentation

Presenter's bio page

Mobile and Pervasive Computing, Quality and Ambient Intelligence Laboratory

Hellenic Open University, Patras, Greece

Email: panagiotakopoulos@eap.gr

Theodor Panagiotakopoulos was born in Greece in 1981. He received his Diploma and PhD from the Department of Electrical and Computer Engineering, University of Patras, Greece in 2006 and 2011 respectively. His research interests include, among others, pervasive computing, internet of things, ambient intelligence, mobile health and ambient assisted living systems, telemedicine and biomedical applications. Until now, he has published over 25 articles in international conferences and journals, as well as in international book chapters. He has participated in 7 National and European R&D projects focusing on IoT and e-Health, as well as on the development of educational content for digital skill acquisition in various application sectors via e-learning programs. Since 2016, he is an adjunct assistant Professor at the Department of Electrical and Computer Engineering of University of Patras.

Thank you for your attention!

MuSA
museum sector alliance

Credits

- Author: Theodor Panagiotakopoulos, HOU
- Technical Reviewers: Christos Pierrakeas and Panagiota Polymeropoulou, HOU
- Scientific Reviewers: Maria Manuela Pinto, University of Porto

www.project-musa.eu

musa@daissy.eap.gr

@MuseumSectorAlliance

#MuseumSectorAlliance

Project Number: 575907-EEP-1-2016-1-EL-EPPKA2-SSA

Co-funded by the
Erasmus+ Programme
of the European Union

HELLENIC OPEN UNIVERSITY

meltingPro LEARNING

ICOM international council of museums Portugal

LINK CAMPUS University

Symbola FONDAZIONE PER LE QUALITÀ ITALIANE

U. PORTO

AKMI

Regione Emilia-Romagna
ibc istituto per i beni artistici culturali e naturali

ICOM international council of museums Greece

culture ACTION europe

MAPA DAS IDEIAS