



# CatchyName: A MEVN-based Cloud Application for Incidence Figures and Vaccination Progress

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**Abstract**—This paper demonstrates an example of a technical report in computer science or software engineering, based on the `cs-techrep` LaTeX class. The example is intended for beginners, e.g., undergraduate students. It contains a basic outline template and usually fills it with dummy text, but some sections are describing the intent of the outline template and its sections. Graphic exclamation marks highlight important remarks.


**Index Terms**—template; lorem ipsum.

{  The abstract does neither mention a thesis in which context a technical report is written nor an institution or any other organizational aspects. It is a summary of the content of the report, thus, usually the objectives and functional requirements of a piece of software. Do NOT remove the abstract, this section is mandatory. Beginners should consider comparing their self-written abstract with the result of a generative AI that summarizes your content after you have written a nearly stable draft version. However, do not use a verbatim copy to replace your abstract, just use generative AI for inspirational purposes. Do NOT use special characters, symbols, or math in your title or abstract. Do NOT use references in the abstract, avoid abbreviations or acronyms. The abstract must look as one paragraph only. Ideally, end the abstract with one sentence stressing out the main output of the paper. }

## I. INTRODUCTION | BACKGROUND AND MOTIVATION | MISSION STATEMENT | ELEVATOR PITCH


The `cs-techrep` formatting is adopted both from IEEE [1] and IARIA [2] styles. The `cs-techrep` LaTeX class is based on IEEEtran class [3]. In addition, be aware of the supplementary IARIA editorial rules [4]  that provide a beginner-friendly set of further advices. It is recommended to use a grammar tool, e.g., the LanguageTool [5] browser plugin in combination with Overleaf [6].


The title of your paper should not exceed two lines . In exceptional cases, three lines might be allowed. A four-line-title is absolutely forbidden (hint: use the longer form in the abstract).


For capitalization of titles and section headings, use a web tool like Capitalize My Title  with the option `chicago` for capitalization rules by Chicago Manual of Style (CMOS).

The `cs-techrep` allows for a `TODO` command that lets the

user mark things to do later, in a simple and visually appealing way.

The pipe symbol “|” in the section headings represents alternatives! Choose one and remove the others . The selectively provided quoted terms are special German alternatives. You may deviate from the structure of this example document and its exemplary section headings.

The introduction needs to be written from perspective of a subject-matter expert  and NOT from a technical perspective. Provide the USPs of your intended software product (in German: “fachliche Alleinstellungsmerkmale”).


{  End the first section with a paragraph describing the structure of the paper. }


## II. OPTIONAL: RELATED WORK

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## III. OPTIONAL: FUNCTIONAL DESIGN

Before diving into a list of requirements, you might provide a narrative of your functional goals and context, if an adequate description exceeds the introduction section.

You might introduce user roles  (cf. Fig. 1). You could also introduce full-fledged personas. The lightweight alternative to personas are simple named users, which you might introduce without methodological fuss like this: “The user stories are described based on the users Nico and Isabelle. Nico is a fan of ... and always wants to ..., but lacks ... . Isabelle is a ... who is always ... and ... .”

You might introduce key concepts  and terms. You might present your own UI prototypes, if these are not covered by screenshots under related work. You might provide a glossary, in DDD known as ubiquitous language.

Some  
TODO

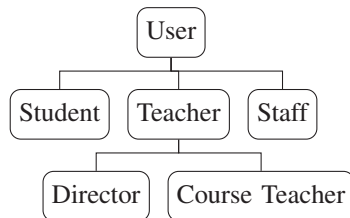


Figure 1. Types of Users

#### IV. FUNCTIONAL REQUIREMENTS I USER STORIES I USE CASES

In case of user stories (agile) use the definition of ready (DoR) **▲** that I provided you in the exercise sheet as checklist for the quality of your user stories. In case of use cases (traditional) use at least the elementary business process (EBP) test and the boss test as quality checks.

You might group the user stories or use cases by the MuS-CoW **▲** method. For both styles, each functional requirement should have a compact title that represents an action.

The user story format **▲** is: As a [type of user], I want [an action] so that [a benefit / a value]. However, the user story is incomplete without a list of acceptance criteria **▲**, which could be specified in a semi-structured Given-When-Then format. Apply user story splitting **▲** method for right sizing your user stories.

##### A. MUST

US1 **Display Available Drivers:** As a passenger, I want several available drivers to be displayed so that I can choose the most suitable option for me.

- Given the app has the passenger's location as GPS coordinates, accessed from the mobile phone sensors
- When the passenger clicks the button to display available drivers
- And there are drivers that were online within the last 20 minutes and don't have an ongoing ride
- Then a HTML list of available drivers is presented to the passenger
- And the app shows only 5 drivers that are closest to the passenger

US2 **Compact Story Title:** As a [type of user], I want [an action] so that [a benefit / a value].

- Acceptance criteria V (input / start data / Given...)
- Acceptance criteria W (key action / When...)
- Acceptance criteria X (business rules / And...)
- Acceptance criteria Y (output / Then...)
- Acceptance criteria Z (result verification / And...)

...

##### B. SHOULD

...

##### C. COULD

...

##### D. WONT

...

#### V. OPTIONAL: NON-FUNCTIONAL REQUIREMENTS

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

#### VI. OPTIONAL: TECHNICAL KEY COMPONENTS I TECHNOLOGY STACK I TECHNICAL OUTLINE

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{ **▲** Beginners' guide against **kindergarten mistakes:** Expand each acronym only when first used; then use only the acronym (however, do not take the abstract into account of this rule). Insert at least a sentence between a section title and subsection title! In-text references (i.e., "text [x][y]..."), leave a space between "text" and "[x]"! Prefer references to footnotes. Explain abbreviations in the paper text. All "section x", "figure x", "table x" must be "Section x", "Figure x", "Table x" (i.e., capital letter)! Across the entire paper; always e.g., and i.e., are followed by a comma ","! Across the entire paper; "which" is preceded by a comma "," or replace a which-without-a-preceding-comma with "that". Check your raster images for appropriate quality! }

{ **▲** You must not leave the bibliography blank! Add appropriate references to your related work. }

A selection of previous technical reports of the CyberLytics lab [7–34] is included as reference and further example.

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