ACADEMIC RESULTS FOR AARON PAZ MARTINEZ

I, the undersigned, Daniel Hadley, Pedagogy Lead of 42 Berlin, hereby certify that:

Aaron Paz Martinez, born on August 25, 1986 in Santiago de Compostela (Spain)

obtained the grades detailed below as of October 07, 2024.

This certificate is delivered upon request for all legal intents and purposes.

Selected in: **July 2023**
Curriculum started on: **April 22, 2024**
Curriculum ended on: **-**

Founded in 2013, 42 is a worldwide network of ICT schools. We are a non-traditional educator offering high-quality and scalable software engineering education to anyone who wants to learn.

It is our mission to prepare the next generation for the jobs of today and tomorrow. We do so using an innovative educational model, which relies on peer-to-peer learning, project-based and hands-on approach to programming. Our innovative model, allowing individual pace and path, has proven that our students become industry-ready software engineers within 2 to 5 years.

The progression of the student inside the curriculum is represented by its level, over 21.
The current level of the student is: **2.07.**

The 42 curriculum is divided into two halves: the common core and the 42 advanced part. Once students complete the first half (the common core), they have the option to either continue their journey in the 42 advanced part, or conclude their progression and become an alumni at any point during this second part.
The current situation of the student is: **in the Common Core.**
See details below.

Made in Berlin, on October 07, 2024

DETAILS

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Here is a description of each part of the curriculum and the current position of the student:

The Common Core

The common core of the 42 curriculum represents the minimum set of skills to be ready for a first professional experience. It provides basic and standard coding skills, as well as a fruitful range of soft skills. The delay of the CC is approximately between 1 and 2 years. The following information represent the skills developed during this part of the curriculum and the current progression of the student:

Aaron Paz Martinez : Common core achieved at: **13%.**

Developed skills during the entire common core:

- *Algorithms & AI:* Standards algorithms on standards structures: searching, sorting, insertion, deletion, balance, on: arrays, linked lists, trees. State machine and asynchronous management.

- *Graphics:* Image management, RGB structure of an image, manipulating areas, drawing into an image, interacting with the window management system and getting user events and inputs from keyboard and mouse, programming with callbacks and event loop.

- *Group & interpersonal:* Collaboration, relationships and group management situations, including different kinds of interactions between people (friendly, tensions ...)

- *Imperative programming:* Basics of coding in C : the C syntax, variable, loops, conditional branches, functions, recursivity, instructions, calculus and expressions, comparisons operators, standard and advanced types, strings processing, structures, includes and libraries, memory allocation and release, linked lists, trees, the C standard library

- *Network & system administration:* Basics of computer networking : IP addresses, subnets, default routing, local network structure, host to host connectivity to network services; Basics of system administration : operating system installation with Linux, setting up security, access, users, storage, installing network services like mail, dns, web server, ...

- *Object-oriented programming:* Object programming principles in C++, classes, namespaces, constructors and destructors, memory management in C++, inheritance, abstraction, overloading, templates, standard C++ library types and tools

- *Rigor:* The need to fulfill administrative and technical constraints. The need for a wide and deep testing process to eliminate failure.

- *System programming:* Classic Unix system interactions : system calls, filesystem access and management, process creation, execution, management; inter-process communications : pipes and signals; device management and ioctl, terminal capabilities; network communication : TCP & UDP sockets, DNS resolution, endianness

- *Web:* The client-server architecture involved in the web, role and actions of the web server, role and actions of the web browser; The HTTP protocol; Web technologies involved : HTML, CSS, Javascript, images and videos; Backend language and framework for dynamic websites: one among php, ruby, python, go, javascript, Rails, Symfony, Django, Node, ... ; MVC model; users web services : web sessions, authentification, cookies, search, caddie, backoffice configuration, ... ; Basics of user experience, user interface, and design.

Details of each validated project in appendix 1.

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The 42 Advanced Part

The 42 Advanced offers a choice of path among various ICT specialisations: each student can select the topic(s) she/he wants to develop and improve. This part of the curriculum also contains several professional experiences (internships, part-time jobs, ...).
No projects completed yet

Professional experience: no professional experience yet

Details of the validated projects in appendix 2.

SPECIAL

A student can eventually benefit from special programs or projects valuable for their personal skill set, and thus included in their curriculum. They are mentioned here:

Name	Equivalent workload
–	

APPENDIX 1

Projects covered during the common core:

Name	Estimated workload	Result	Associated skills	Validation date
Libft	70H	Pass with bonus	Rigor, Algorithms & AI, Imperative programming	May 20, 2024
ft_printf	70H	Pass	Rigor, Algorithms & AI	June 16, 2024
Born2beroot	40H	Pass	Rigor, Network & system administration	July 02, 2024
get_next_line	70H	Pass	Rigor, Algorithms & AI, Unix	July 22, 2024
Exam Rank 02	0H	Pass		August 30, 2024
push_swap	60H	in progress	Rigor, Algorithms & AI, Unix, Imperative programming	-
pipex	50H	in progress	Unix, Imperative programming	-
FdF	60H	in progress	Rigor, Algorithms & AI, Imperative programming, Graphics	-

APPENDIX 2

Projects covered during the 42 advanced:

Name	Estimated workload	Result	Associated skills	Validation date
–				

Internship and professional experiences				
Company name	Duration	Validation	Skills	Validation date
–				

APPENDIX 3

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Description of each covered project:

Name	Description
Libft	This project is your very first project as a student at 42. You will need to recode a few functions of the C standard library as well as some other utility functions that you will use during your whole cursus.
ft_printf	This project is pretty straightforward, you have to recode printf. You will learn what is and how to implement variadic functions. Once you validate it, you will reuse this function in your future projects.
Born2beroot	This project aims to introduce you to the wonderful world of virtualization.
get_next_line	May it be a file, stdin, or even later a network connection, you will always need a way to read content line by line. It is time to start working on this function, which will be essential for your future projects.
Exam Rank 02	This project will evaluate your abilities and knowledge about programming.

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