CURRICULUM VITAE

Position Title and No.	Quality Assurance Engineer
Name of Expert:	Maculetchi Mihaela
Date of Birth:	16 June 1986
Country of Citizenship/Residence	Republic of Moldova

Education:

- Master's degree at the Faculty of Computers, Informatics and Microelectronics of the Technical University of Moldova, 2024 - present
- The Faculty of Business and Administration, Academy of Economic Studies of Moldova, 2005-2008

Certifications:

- ISTQB Certified Tester Foundation Level certification
- Educational IT Center Skillup: Certificate No: KV202119- Software Testing
- https://app.skillsclub.com/credential/30881-b2bda8a7544e843a5cb6393a6c32ec19cb030e951418e80807cf146e96f6835b

Professional Experience Record:

Period	Employing organization and position	Country	Summary of activities performed
March 2019 - present	**CODWER/** Software Tester	Republic Of Moldova	**Project 1 – FOD 2 – MA** (Military service record) The service developed for the request of the military card, which is the main military record document, of the reservist, which certifies his finding or removal in/from the military records, military training **Responsibility**: Software Tester **Period:** October 2024 – present **Technologies stack:** JavaScript, Angular jQuery, HTML, CSS, SQL Server, XML, JSON, Highcharts and database technology, Entity Framework, SQL40 **Methodology:** Agile, SCRUM **Activities:** ➢ Analyzed Business Requirements to create test cases and performed testing ➢ Performed QA testing and writing test documentation including regression testing and system testing ➢ Making QA testing using product description and Chrome and Mozilla Debug tool for Web-Services ➢ Create and fill in Test Cases and Check List

			➢ Planned test cases and test plan for specific functionalities
			➢ Performed cross-platform testing and on multiple resolutions to identify possible issues on front-end side
			➢ Performed regress, functional, load, stress, data testing and security testing
			➢ Performed security testing using automated tools and manual vulnerabilities testing (OWASP)
			➢ Designed, performed and documented manual test cases
			➢ Performed automated testing (using Protractor framework – Angular end- to-end testing)
			➢ Performed functionality testing, ad-hoc testing, smoke testing, compatibility testing, Integration testing, white box testing, black box testing & system
			➢ Performed testing on databases and data structures
			➢ Find out and describe a BUGS using JIRA/AZURE
			➢ Re-check WEB-service functionality after BUG fix using SELENIUM IDE or POSTMAN API.
			➢ Making Checklist and Check Cases.
			➢ Making Requirement Traceability Matrix
			➢ Making BUG report
			➢ Making Manual and Automation testing using SELENUIM IDE and POSTMAN API
			Project 2 – FOD 2 – Appointments System designed and developed for the service of Requesting examination and scheduling for the theoretical test, practical driving of the vehicle. **Responsibility**: Software Tester **Period:** June 2024- present **Technologies stack:** JavaScript, Angular jQuery, HTML, CSS, SQL Server, XML, JSON, Highcharts and database technology, Entity Framework, SQL40 **Methodology:** Agile, SCRUM **Activities:** ➢ Analyzed Business Requirements to create test cases and performed testing

			➢ Performed QA testing and writing test documentation including regression testing and system testing
			➢ Making QA testing using product description and Chrome and Mozilla Debug tool for Web-Services
			➢ Create and fill in Test Cases and Check List
			➢ Planned test cases and test plan for specific functionalities
			➢ Performed cross-platform testing and on multiple resolutions to identify possible issues on front-end side
			➢ Performed regress, functional, load, stress, data testing and security testing
			➢ Performed security testing using automated tools and manual vulnerabilities testing (OWASP)
			➢ Designed, performed and documented manual test cases
			➢ Performed automated testing (using Protractor framework – Angular end- to-end testing)
			➢ Performed functionality testing, ad-hoc testing, smoke testing, compatibility testing, Integration testing, white box testing, black box testing & system
			➢ Performed testing on databases and data structures
			➢ Find out and describe a BUGS using JIRA/AZURE
			➢ Re-check WEB-service functionality after BUG fix using SELENIUM IDE or POSTMAN API.
			➢ Making Checklist and Check Cases.
			➢ Making Requirement Traceability Matrix
			➢ Making BUG report
			➢ Making Manual and Automation testing using SELENUIM IDE and POSTMAN API
			Project 3 – FOD 2 – ANSA (National Agency for Food Safety) System designed to modernize and streamline the operations of the National Food Safety Agency. The platform enables efficient handling of food safety processes, reporting, and communication between the agency and stakeholders, enhancing transparency and

operational efficiency.

Responsibility: Software Tester
Period: June 2024- present
Technologies stack: JavaScript, Angular jQuery, HTML, CSS, SQL Server, XML, JSON, Highcharts and database technology, Entity Framework, SQL40
Methodology: Agile, SCRUM
Activities:

- ➢ Analyzed Business Requirements to create test cases and performed testing
- ➢ Performed QA testing and writing test documentation including regression testing and system testing
  Making QA testing using product description and Chrome and Mozilla Debug tool for Web-Services
- ➢ Create and fill in Test Cases and Check List
- ➢ Planned test cases and test plan for specific functionalities
- ➢ Performed cross-platform testing and on multiple resolutions to identify possible issues on front-end side
- ➢ Performed regress, functional, load, stress, data testing and security testing
- ➢ Performed security testing using automated tools and manual vulnerabilities testing (OWASP)
- ➢ Designed, performed and documented manual test cases
- ➢ Performed automated testing (using Protractor framework – Angular end- to-end testing)
- ➢ Performed functionality testing, ad-hoc testing, smoke testing, compatibility testing, Integration testing, white box testing, black box testing & system
- ➢ Performed testing on databases and data structures
- ➢ Find out and describe a BUGS using JIRA/AZURE
- ➢ Re-check WEB-service functionality after BUG fix using SELENIUM IDE or POSTMAN API.
- ➢ Making Checklist and Check Cases.
- ➢ Making Requirement Traceability Matrix
- ➢ Making BUG report

			➢ Making Manual and Automation testing using SELENUIM IDE and POSTMAN API **Project 4 – FOD 2 – IGPF** (General Inspectorate of the Border Police) The electronic service: Extract from the integrated informational system of the Border Police regarding the crossing of the state border of the Republic of Moldova **Responsibility**: Software Tester **Period:** June 2024- present **Technologies stack:** JavaScript, Angular jQuery, HTML, CSS, SQL Server, XML, JSON, Highcharts and database technology, Entity Framework, SQL40 **Methodology:** Agile, SCRUM **Activities:** ➢ Analyzed Business Requirements to create test cases and performed testing ➢ Performed QA testing and writing test documentation including regression testing and system testing ➢ Making QA testing using product description and Chrome and Mozilla Debug tool for Web-Services ➢ Create and fill in Test Cases and Check List ➢ Planned test cases and test plan for specific functionalities ➢ Performed cross-platform testing and on multiple resolutions to identify possible issues on front-end side ➢ Performed regress, functional, load, stress, data testing and security testing ➢ Performed security testing using automated tools and manual vulnerabilities testing (OWASP) ➢ Designed, performed and documented manual test cases ➢ Performed automated testing (using Protractor framework – Angular end- to-end testing) ➢ Performed functionality testing, ad-hoc testing, smoke testing, compatibility testing, Integration testing, white box testing, black box testing & system ➢ Performed testing on databases and data

			structures
			➤ Find out and describe a BUGS using JIRA/AZURE
			➤ Re-check WEB-service functionality after BUG fix using SELENIUM IDE or POSTMAN API.
			➤ Making Checklist and Check Cases.
			➤ Making Requirement Traceability Matrix
			➤ Making BUG report
			➤ Making Manual and Automation testing using SELENUIM IDE and POSTMAN API
			Project 5 – FOD 2 – ANTA (National Auto Transport Agency) Electronic service: Request for issuing, replacing, changing and renewing tachographic cards.
			Responsibility: Software Tester
			Period: June 2024- present
			Technologies stack: JavaScript, Angular jQuery, HTML, CSS, SQL Server, XML, JSON, Highcharts and database technology, Entity Framework, SQL40
			Methodology: Agile, SCRUM
			Activities:
			➤ Analyzed Business Requirements to create test cases and performed testing
			➤ Performed QA testing and writing test documentation including regression testing and system testing
			➤ Making QA testing using product description and Chrome and Mozilla Debug tool for Web-Services
			➤ Create and fill in Test Cases and Check List
			➤ Planned test cases and test plan for specific functionalities
			➤ Performed cross-platform testing and on multiple resolutions to identify possible issues on front-end side
			➤ Performed regress, functional, load, stress, data testing and security testing
			➤ Performed security testing using automated tools and manual vulnerabilities testing (OWASP)
			➤ Designed, performed and documented manual test cases and automated testing (using

				Protractor framework – Angular end- to-end testing)

Protractor framework – Angular end- to-end testing)

➢ Performed functionality testing, ad-hoc testing, smoke testing, compatibility testing, Integration testing, white box testing, black box testing & system.

➢ Performed testing on databases and data structures

➢ Find out and describe a BUGS using JIRA/AZURE

➢ Re-check WEB-service functionality after BUG fix using SELENIUM IDE or POSTMAN API.

➢ Making Checklist and Check Cases.

➢ Making Requirement Traceability Matrix

➢ Making BUG report

➢ Making Manual and Automation testing using SELENUIM IDE and POSTMAN API

Project 6 – FOD 2 – RBI (Real estate registration)
It is a service developed and intended for users with the role of a notary and its purpose is to digitize the operational process of submitting the application for requesting the services of registration of immovable assets and the rights over them through the electronic services development platform of the public institution "Government Agency" Electronics".

Responsibility: Software Tester
Period: January 2024-May 2024
Technologies stack: JavaScript, Angular jQuery, HTML, CSS, SQL Server XML, JSON, Highcharts and database technology, Entity Framework, SQL40
Methodology: Agile, SCRUM
Activities:

➢ Analyzed Business Requirements to create test cases and performed testing

➢ Performed QA testing and writing test documentation including regression testing and system testing

➢ Making QA testing using product description and Chrome and Mozilla Debug tool for Web-Services

➢ Create and fill in Test Cases and Check List

➢ Planned test cases and test plan for specific

				functionalities
			➤	Performed cross-platform testing and on multiple resolutions to identify possible issues on front-end side
			➤	Performed regress, functional, load, stress, data testing and security testing
			➤	Performed security testing using automated tools and manual vulnerabilities testing (OWASP)
			➤	Designed, performed and documented manual test cases and automated testing (using Protractor framework – Angular end- to-end testing)
			➤	Performed functionality testing, ad-hoc testing, smoke testing, compatibility testing, Integration testing, white box testing, black box testing & system.
			➤	Performed testing on databases and data structures
			➤	Find out and describe a BUGS using JIRA/AZURE
			➤	Re-check WEB-service functionality after BUG fix using SELENIUM IDE or POSTMAN API.
			➤	Making Checklist and Check Cases.
			➤	Making Requirement Traceability Matrix
			➤	Making BUG report
			➤	Making Manual and Automation testing using SELENUIM IDE and POSTMAN API

Project 7 – FOD 2 – EDL
Primary issuance, change, restoration of the driver's license

Responsibility: Software Tester
Period: March 2024 - July 2024
Technologies stack: JavaScript, Angular jQuery, HTML, CSS, SQL Server, XML, JSON, Highcharts and database technology, Entity Framework, SQL40
Methodology: Agile, SCRUM
Activities:
➤ Analyzed Business Requirements to create test cases and performed testing
➤ Performed QA testing and writing test documentation including regression testing

			and system testing
			➢ Making QA testing using product description and Chrome and Mozilla Debug tool for Web-Services
			➢ Create and fill in Test Cases and Check List
			➢ Planned test cases and test plan for specific functionalities
			➢ Performed cross-platform testing and on multiple resolutions to identify possible issues on front-end side
			➢ Performed regress, functional, load, stress, data testing and security testing
			➢ Performed security testing using automated tools and manual vulnerabilities testing (OWASP)
			➢ Performing manual and automated testing (using Protractor framework – Angular end-to-end testing)
			➢ Performed functionality testing, ad-hoc testing, smoke testing, compatibility testing, Integration testing, white box testing, black box testing & system.
			➢ Performed testing on databases and data structures
			➢ Find out and describe a BUGS using JIRA/AZURE
			➢ Re-check WEB-service functionality after BUG fix using SELENIUM IDE or POSTMAN API.
			➢ Making Checklist and Check Cases.
			➢ Making Requirement Traceability Matrix
			➢ Making BUG report
			➢ Making Manual and Automation testing using SELENUIM IDE and POSTMAN API
			Project 8 – FOD 2 – RSCV (State Register of Vehicle Drivers) Electronic service "Extract from the State Register of Vehicle Drivers" (by placing the order request online)
			Responsibility: Software Tester
			Period: November 2023 - February 2024
			Technologies stack: JavaScript, Angular jQuery, HTML, CSS, SQL Server, XML, JSON, Highcharts

			and database technology, Entity Framework, SQL40 **Methodology:** Agile, SCRUM **Activities**: ➢ Analyzed Business Requirements to create test cases and performed testing ➢ Performed QA testing and writing test documentation including regression testing and system testing ➢ Making QA testing using product description and Chrome and Mozilla Debug tool for Web-Services ➢ Create and fill in Test Cases and Check List ➢ Planned test cases and test plan for specific functionalities ➢ Performed cross-platform testing and on multiple resolutions to identify possible issues on front-end side ➢ Performed regress, functional, load, stress, data testing and security testing ➢ Performed security testing using automated tools and manual vulnerabilities testing (OWASP) ➢ Performing manual and automated testing (using Protractor framework – Angular end-to-end testing) ➢ Performed functionality testing, ad-hoc testing, smoke testing, compatibility testing, Integration testing, white box testing, black box testing & system. ➢ Performed testing on databases and data structures ➢ Find out and describe a BUGS using JIRA/AZURE ➢ Re-check WEB-service functionality after BUG fix using SELENIUM IDE or POSTMAN API. ➢ Making Checklist and Check Cases. ➢ Making Requirement Traceability Matrix ➢ Making BUG report ➢ Making Manual and Automation testing using SELENUIM IDE and POSTMAN API **Project 9 – FOD 2 – EVL** Transcription service of the transfer of ownership of

			the vehicle, with the issuance of the registration certificate
			Responsibility: Software Tester **Period:** November 2023 - April 2024 **Technologies stack**: JavaScript, Angular jQuery, HTML, CSS, SQL Server, XML, JSON, Highcharts and database technology, Entity Framework, SQL40 **Methodology:** Agile, SCRUM **Activities:** ❯ Analysed Business Requirements to create test cases and performed testing ❯ Performed QA testing and writing test documentation including regression testing and system testing ❯ Making QA testing using product description and Chrome and Mozilla Debug tool for Web-Services ❯ Create and fill in Test Cases and Check List ❯ Planned test cases and test plan for specific functionalities ❯ Performed cross-platform testing and on multiple resolutions to identify possible issues on front-end side ❯ Performed regress, functional, load, stress, data testing and security testing ❯ Performed security testing using automated tools and manual vulnerabilities testing (OWASP) ❯ Performing manual and automated testing (using Protractor framework – Angular end-to-end testing) ❯ Performed functionality testing, ad-hoc testing, smoke testing, compatibility testing, Integration testing, white box testing, black box testing & system. ❯ Performed testing on databases and data structures ❯ Find out and describe a BUGS using JIRA/AZURE ❯ Re-check WEB-service functionality after BUG fix using SELENIUM IDE or POSTMAN API. ❯ Making Checklist and Check Cases. ❯ Making Requirement Traceability Matrix ❯ Making BUG report

			➤ Making Manual and Automation testing using SELENUIM IDE and POSTMAN API

Project 10 – MDOCS

An IT solution provided as a SaaS service based on the MCloud platform designed to implement a centralized mechanism for storing and sharing documents resulting from the provision of public services, and its beneficiaries will be natural persons and legal entities of public and private law.

Responsibility: Software Tester
Period: January - November 2023
Technologies stack: C#, ASP.NET MVC Core, Entity Framework Core, SQL Server, Blazor, Docker, Kubernetes, Azure, Harbor, Helm, Elasticsearch, Prometheus.
Methodology: Agile
Activities:

➤ Making QA testing using product description and Chrome and Mozilla Debug tool for Web-Services
➤ Performed QA testing and writing test documentation including regression testing and system testing
➤ Planned test cases and test plan for specific functionalities.
➤ Created and managed test plans, test cases, user manuals
➤ Performed regress, functional, load, stress, data testing and security testing
➤ Performed security testing using automated tools and manual vulnerabilities testing (OWASP)
➤ Performed manual and automated testing (using Protractor framework – Angular end-to-end testing)
➤ Performed functionality testing, ad-hoc testing, smoke testing, compatibility testing, Integration testing, white box testing, black box testing & system
➤ Performed testing on databases and data structures
➤ Create and fill in Test Cases and Check List

			➤ Find out and describe a BUGS using JIRA/AZURE
			➤ Re-check WEB-service functionality after BUG fix using SELENIUM IDE or POSTMAN API
			➤ Making Checklist and Test Cases
			➤ Making Requirement Traceability Matrix
			➤ Making BUG report
			➤ Making Manual and Automation testing using SELENUIM IDE and POSTMAN API
			➤ Created project technical documentation and User Manuals for all types of users, including integration guide and end-user documentation.
			➤ Updated User Manuals where changes were made to reflect the actual state of the application.
			Project 11 **RERU (Recruitment and evaluation of Human Resources)** RERU is a platform destinated to evaluate and hiring personal. It was developed for Ministry of Interior. It is a platform designed on microservices with submodules (HR, Evaluation, Logging application). **Responsibility**: Software Tester **Period:** 2021 - 2022 **Technologies stack**: C#, .NET Core MVC, Web API (REST API), JSON, XML, ASP, SQL Server 2019 **Methodology**: Agile **Activities:**
			➤ Making QA testing using product description and Chrome and Mozilla Debug tool for Web-Services
			➤ Performed QA testing and writing test documentation including regression testing and system testing
			➤ Planned test cases and test plan for specific functionalities
			➤ Created and managed test plans, test cases, user manuals
			➤ Performed regress, functional, load, stress, data testing and security testing
			➤ Performed security testing using automated

			tools and manual vulnerabilities testing (OWASP)
			➢ Performed manual and automated testing (using Protractor framework – Angular end-to-end testing)
			➢ Performed functionality testing, ad-hoc testing, smoke testing, compatibility testing, Integration testing, white box testing, black box testing & system
			➢ Performed testing on databases and data structures
			➢ Create and fill in Test Cases and Check List.
			➢ Find out and describe a BUGS using JIRA/AZURE
			➢ Re-check WEB-service functionality after BUG fix using SELENIUM IDE or POSTMAN API
			➢ Making Checklist and Test Cases
			➢ Making Requirement Traceability Matrix
			➢ Making BUG report
			➢ Making Manual and Automation testing using SELENUIM IDE and POSTMAN API
			➢ Created project technical documentation and User Manuals for all types of users, including integration guide and end-user documentation.
			➢ Updated User Manuals where changes were made to reflect the actual state of the application
			➢ Prepared training materials, remote training modules for e-learning platforms for end-users
			➢ Training sessions for system administrators
			Project 12- CODWER ERP (Personal Module) CODWER ERP is a platform designed on microservices with submodules. It was developed for corporation use and depending on the need of the organization, accesses to the modules of this platform will be given. **Responsibility**: Software Tester **Period:** 2021 - 2022 **Technologies stack:** C#, .NET Core MVC, Web API (REST API), JSON, XML, ASP, SQL Server 2019

			Methodology: Agile
			Activities:

Methodology: Agile

Activities:

- ➢ Analyzed Business Requirements to create test cases and performed testing
- ➢ Performed QA testing and writing test documentation including regression testing and system testing
- ➢ Making QA testing using product description and Chrome and Mozilla Debug tool for Web-Services
- ➢ Create and fill in Test Cases and Check List
- ➢ Planned test cases and test plan for specific functionalities
- ➢ Performed cross-platform testing and on multiple resolutions to identify possible issues on front-end side
- ➢ Performed regress, functional, load, stress, data testing and security testing
- ➢ Performing manual and automated testing (using Protractor framework – Angular end-to-end testing)
- ➢ Performed functionality testing, ad-hoc testing, smoke testing, compatibility testing, Integration testing, white box testing, black box testing & system.
- ➢ Performed testing on databases and data structures
- ➢ Find out and describe a BUGS using JIRA/AZURE
- ➢ Re-check WEB-service functionality after BUG fix using SELENIUM IDE or POSTMAN API.
- ➢ Making Checklist and Check Cases.
- ➢ Making Requirement Traceability Matrix
- ➢ Making BUG report
- ➢ Making Manual and Automation testing using SELENUIM IDE and POSTMAN API
- ➢ Created project technical documentation and User Manuals for all types of users, including end-user documentation
- ➢ Updated User Manuals where changes were made to reflect the actual state of the application
- ➢ Prepared training materials, remote training modules for e-learning platforms for end-

| | | | | users. |
| | | | | ➤ Training sessions for system administrators |

Project 13-CRM

Project developed to meet the client specific needs after trying different available solutions like SalesForce. Besides providing the functionality to manage contact relationships, the app gives insight on which opportunity is more profitable for the client.

Responsibility: Software Tester
Period: July 2020 – July 2022
Technologies stack: JavaScript, Angular jQuery, HTML, CSS, SQL Server, XML, JSON, Highcharts and database technology, Entity Framework, SQL40
Methodology: Agile
Activities:

➤ Analyzed Business Requirements to create test cases and performed testing
➤ Performed QA testing and writing test documentation including regression testing and system testing
➤ Making QA testing using product description and Chrome and Mozilla Debug tool for Web-Services
➤ Create and fill in Test Cases and Check List
➤ Planned test cases and test plan for specific functionalities
➤ Performed cross-platform testing and on multiple resolutions to identify possible issues on front-end side
➤ Performed regress, functional, load, stress, data testing and security testing
➤ Performed security testing using automated tools and manual vulnerabilities testing (OWASP)
➤ Performing manual and automated testing (using Protractor framework – Angular end-to-end testing)
➤ Performed functionality testing, ad-hoc testing, smoke testing, compatibility testing, Integration testing, white box testing, black box testing & system.
➤ Performed testing on databases and data structures

			➢ Find out and describe a BUGS using JIRA/AZURE
			➢ Re-check WEB-service functionality after BUG fix using SELENIUM IDE or POSTMAN API.
			➢ Making Checklist and Check Cases.
			➢ Making Requirement Traceability Matrix
			➢ Making BUG report
			➢ Making Manual and Automation testing using SELENUIM IDE and POSTMAN API
			➢ Created project technical documentation and User Manuals for all types of users, including end-user documentation
			➢ Updated User Manuals where changes were made to reflect the actual state of the application
			➢ Prepared training materials, remote training modules for e-learning platforms for end-users.
			➢ Training sessions for system administrators

Project 14
Sales Portal & Warehouse Management System
The project integrated in the client's daily in- house activity, works in a symbiosis with an older ERP system and is the sum of different components ranging from web applications to Windows services. The development of a sales portal as internal tool to facilitate the warehouse operations as well the financial and product management departments.

Responsibility: Software Tester
Period: July 2019 – July 2020
Technologies stack: JavaScript, Angular jQuery, HTML, CSS, SQL Server, XML, JSON, Highcharts and database technology, Entity Framework, SQL40
Methodology: Agile, SCRUM
Activities:
➢ Analyzed Business Requirements to create test cases and performed testing
➢ Performed QA testing and writing test documentation including regression testing and system testing
➢ Making QA testing using product description and Chrome and Mozilla Debug tool for Web-

			Services
			➤ Create and fill in Test Cases and Check List
			➤ Planned test cases and test plan for specific functionalities
			➤ Performed cross-platform testing and on multiple resolutions to identify possible issues on front-end side
			➤ Performed regress, functional, load, stress, data testing and security testing
			➤ Performing manual and automated testing (using Protractor framework – Angular end-to-end testing)
			➤ Performed functionality testing, ad-hoc testing, smoke testing, compatibility testing, Integration testing, white box testing, black box testing & system.
			➤ Performed testing on databases and data structures
			➤ Find out and describe a BUGS using JIRA/AZURE
			➤ Re-check WEB-service functionality after BUG fix using SELENIUM IDE or POSTMAN API.
			➤ Making Checklist and Check Cases.
			➤ Making Requirement Traceability Matrix
			➤ Making BUG report
			➤ Making Manual and Automation testing using SELENUIM IDE and POSTMAN API
			➤ Created project technical documentation and User Manuals for all types of users, including end-user documentation
			➤ Updated User Manuals where changes were made to reflect the actual state of the application
			➤ Prepared training materials, remote training modules for e-learning platforms for end-users.
			➤ Training sessions for system administrators

Language Skills:

Language	Reading	Speaking	Writing
Romanian	native	native	native

| English | B2 | B2 | B2 |
| Russian | B1 | A2 | A2 |