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| A picture of a winding road and trees  Background of TAVSSOnContainers  Background | Background  Ahmed Khalil  Graduation Project |

* **The Traditional Monolithic systems have not the ability to sustain the learning systems and they don’t scalable enough to integrate new methodologies of learning from the external environments. Accepting the Microservice architecture and the Agile process to these environments make a new life for solving all the problems.**
* **Imagine that the faculty need to adapt a new service, with different development architecture and different programming languages, the traditional systems can’t handle it, but the Microservice have this ability to merge and conquer all other systems; make the process of development very easy by divide the development teams to SCRUMS.**

* **This system can make the faculties happy places to learn and develop and joy by integrate many interactive systems from everywhere and anytime, Make the development of Agile techniques 37% faster.**
* **Microservices must be implemented using Agile Process because it’s an Incremental Environment**
  + Applying the Agile SCRUM framework as a core of development processes.
  + Using the Product Backlog and divide it to many sprints Backlogs for **Incremental** working.
  + Every Backlog contain a Coarse-grained service Analysis such as user stories
  + Packing every delivery of the project directly to the release process for deployment.
  + Making Azure DEVOPS the platform of managing the development process.
* **Using DEVOPS plans and tools to manage configuration and control quality**

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|  | Deliver value to users faster using proven agile tools to plan, track, and discuss work across the teams. |
|  | Get unlimited, cloud-hosted private Git repos and collaborate to build better code with pull requests and advanced file management. |
|  | Build, test, and deploy with CI/CD that works with any language, platform, and cloud. Connect to GitHub or any other Git provider and deploy continuously. |
|  | Test and ship with confidence using manual and exploratory testing tools. |
|  | Create, host, and share packages with team, and add artifacts to CI/CD pipelines with a single click. |
| **نتيجة بحث الصور عن ‪Circle CI logo‬‏** | allows us to be confident in the software we build before taking it out for a drive. |
| **صورة ذات صلة** | The only independent container platform that enables organizations to seamlessly build, share and run any application, anywhere—from hybrid cloud to the edge. |
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* **Using the .Net Core for Microservices Environment as a lightweight server running on docker containers.**
* **Using Angular for web platform and Android vs IOS for phone platform.**
* **Using RabbitMQ as the service bus to serve events.**
* **Using SQL Server and MongoDB for databasing using single database per service design pattern**
* **Using OCELOT middleware for implementing API Gateway Design Patterns.**

