Pathway in Enterprise Systems Engineering (PENS)

Internship Framework Progress Overview

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Aim

The internship Model/Framework assists Palestinian education institutions in providing skill development for programs that is relevant and useful, and it aligns graduates and their skills with industry needs, through internship experiences.

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Internship Model

- A Model document was outlined and shall be uploaded on the server shortly

- Recommendations were documented based on discussions and consultations with people from the Industry and academia

- We received some feedback from some partners.

- The issue how to bring these recommendations into actual implementations

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Recommendations

- Build a collaborative group of computing experts from both the academia and the industry particularly enterprises etc.

- Group could provide guidelines, recommendations and assistance with regard to computing practices and curricula development.

- Also allow senior students to have the environments to do some real-time practices although there are strict rules that govern enterprises.

- Push to start the collaboration into formal action such as MOU etc between institutions and disseminate its objectives.

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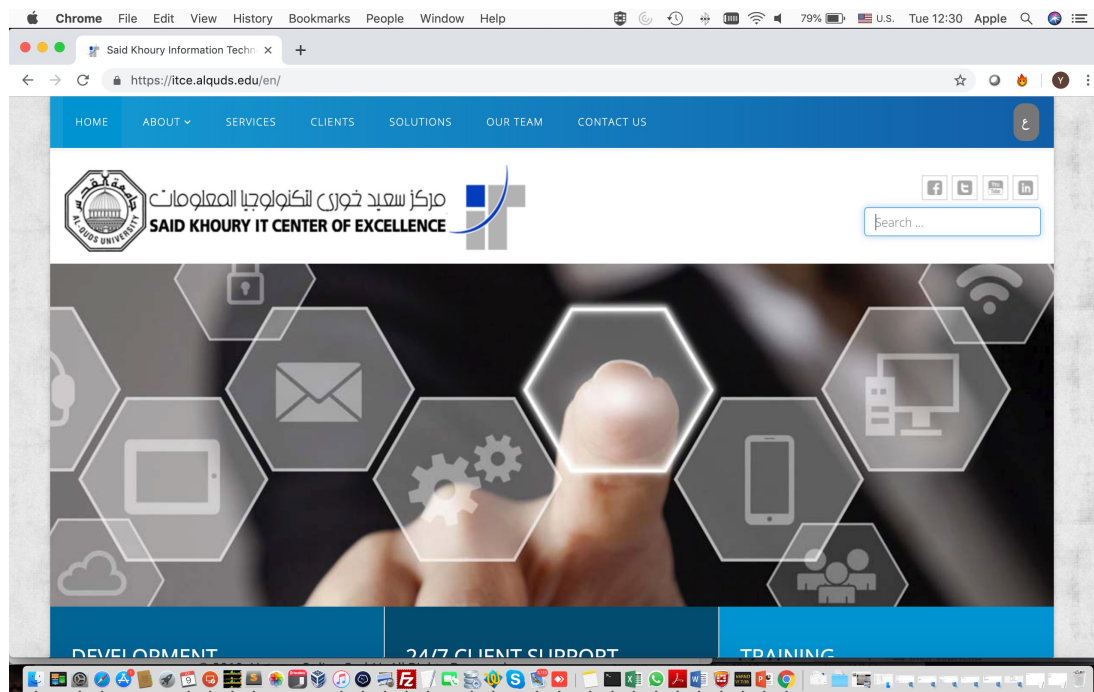Pathway in Enterprise Systems Engineering

MOU

- We are trying to formulate a model/document of collaboration between some of these enterprises and the partners/academia.

- Parties' obligations include the development of the training material, theoretical training, legal aspects as well as technical aspects from academic perspective

- Practical training and practical cases are to be envisaged mostly relevant to the PENS' courses under development.

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Suggestions

- Develop an infrastructure in both equipment and software as well as capacity building in this field.

- In Palestine, some universities have associated technical training/research and development bodies . These bodies can work as partners with the industry.

- What about Tunisia ?

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AQU --https://itce.alquds.edu/en/

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http://www.pens.ps – Pathway in Enterprise Systems Engineering

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Birzeit University - http://home.birzeit.edu/nzitce/

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Progress /Achieved

- PITA – Palestinian Association of IT companies

- This association groups IT companies in Palestine

- It has recently activated and supported committees/group of people in the academia and the Industry .

- Example : FINTECH   group /Palestine

- ASD is a member of this group and is actively contributing to it as part of PITA.

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Progress Achieved / ASD

- March 12-13 2019 ASD attended a workshop organized by the Palestinian Higher council for Innovation

- Workshop was centered on International best practices: The Regional Experience in strengthening linkages between industry and Academia to improve industrial competitiveness

- Funded and supported by the European Union

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Progress Achieved / ASD

- Keynote speakers include :

  – Dr. Nidal Jayyousi /Erasmus Projects coordinator in Palestine : Review of the experiences of partnership between universities and industry in Palestine, Erasmus+ Projects

  – Dr. Heider Frehat / ESCWA : International best practices: The Regional Experience in strengthening linkages between industry and Academia to improve industrial competitiveness

  – Bpifrance /International best practices: The French model of valorization of the research and the maturation of the transfer of technology: Presentation of the SATT (Technology Transfer Acceleration Companies).

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Progress Achieved / ASD and PUTK

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Another good opportunity

- Fikra - Paltel Group Innovation Hub

- Although this innovation center is to help startups, it can also serve as medium /link between different institutions

 https://www.facebook.com/FikraPaltelGroup/

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Next Steps

- Continue checking possible cooperation strategies with potential partners

- Add the documents/activities to suggested Framework document

- Resend and upload again for partners' final review on repository , website

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Practical Integration examples

- Some sample real-time integrations done

- 1st example : Banking System and Doctors Association System

- 2nd example : POS (Point of Sale Machines) and ERP system

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Banking System and Doctors Association System-1

- Banking System (operated by bank across the country)

- Doctors Association has a system recording yearly payments and fees by the doctors.

- These are 2 different systems in all terms (technology, DB, target etc)

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Banking System and Doctors Association System-2

- Requirement is that payments/fees have to be done at the Bank branches.

- Instead of getting a report from the bank and then upload it to the Doctors' association system, this has to be automated.

- When a bank transaction is done , it has to be automatically visible to the Doctors' system.

- Integration entails the Doctors' system provide a web service where bank system inquires and records the payment when a doctor visits the bank or when he/she paid online using the bank online system.

- Web service was prepared from Doctors' system part with clear authentication and agreed protocol.

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Point of Sale - > ERP System

- Point of Sale system works in isolation as works offline even when no connection with the server

- When the connection with the server is resumed, data is synchronized between both such as :
  – POS sends sales data to the ERP
  – Updates to items, prices, discounts are fetched from the server

- Idea is to integrate both systems in a way that keep both systems independent and they offer interfaces/web services etc for such an integration.

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Thank you for your attention!

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