Business and Leadership Council Meeting Minutes
Programming- KSA Feedback with Curriculum Updates

CHAIRPERSON: Karen Boatman		
MEETING DATE: **April 5, 2024**	MEETING TIME: 3pm	MEETING LOCATION:
RECORDER:		PREVIOUS MEETING: November 22, 2024

MEMBERS PRESENT: (P = Present) Add nonmembers to bottom of table with heading "Others Present."

P?	Name and Title (List all)	Business Affiliation	Email	Best contact number
X	Karen Boatman			
X	Adrine Harrell-Carter			
X	Holly Hicks	AC Business Technology Advisor		
X	Star Rayburn	Skylabs Technology LLC	star@skylabstechnology.io	480-343-5451
X	Zack Newbill	Senior Software Developer AQHA	znewbill41@gmail.com	806-420-1217
X	Delane McUne	AC Faculty		
X	Timothy Vo	AC Faculty		
X	Melissa McLeland	Executive Secretary for STEM	Mdhacker22@actx.edu	806-345-5662
X	Madison Martin	Senior Software Developer for Allata	Madison.53.martin@gmail.com	806-828-9661
X	David White	Web Master San Jacinto College	david.white@eduwebguy.com	979-595-6531
X	AJ Cunha	Cyber Security Technology Specialist AC Innovation Outpost	acunha@actx.edu	806-371-2998
X	Ryan Francis	AC Innovation Outpost	rfrancis@actx.edu	806-371-5472

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X	Julian Jacquez	Software Developer-Skylabs Technology LLC	julian@skylabstechnology.io	806-922-6639

Minutes	
Key Discussion Points	**Discussion**
Old Business:	
Continuing Business:	
New Business:	The group discussed ways to improve programming education, focusing on foundational skills, adapting to industry trends, and enhancing curriculum development. They also discussed the importance of teaching web development best practices, including the use of JavaScript and React, security, and exposure to different programming languages and technologies. Practical experience was emphasized as crucial for software development education, and the redesign of the computer science program's curriculum was discussed to align with industry standards. The advantages and limitations of React Native and native app development were also discussed, with a hybrid approach recommended. Finally, the ease of use and ability to create a website with a single application of Dotnet Framework were discussed, with the importance of exposing developers to different platforms highlighted.
Curriculum Decisions:	**Curriculum changes for computer science track** • Karen Boatman kicks off meeting by introducing new faces and discussing curriculum changes. • Holly Hicks introduces herself as new advisor CIS. • Karen Boatman discusses changes to the computer science track, including the addition of two new programming classes: ITSC 1302 (computer programming) and ITSE 231 (object-oriented programming). • The department is replacing the existing database class with a new class on MySQL, based on student feedback.

- Karen Boatman and others discuss adding advanced database programming to the computer science track, considering options like SQL, MySQL, SQL Server, and Mongo.
- Timothy Vo answers a question about covering all of those options in the course.

Software development and programming concepts.

- Speakers discuss MongoDB Academy and NoSQL databases, including installation and usage.
- Karen Boatman and Zack discuss the importance of grasping foundational skills in computer programming, with Zack highlighting the need for a new curriculum to keep up with industry changes.
- Star emphasizes the importance of understanding GET requests in web development.

Software development best practices and security measures.

- Star discusses the importance of considering the ramifications of not solving a problem, particularly when moving an application from internal to external use.
- Star shares their experience of learning from mistakes by actively preventing failures in their work.
- Timothy emphasizes the importance of defensive programming to avoid basic application crashes.

Cloud computing and software development.

- Karen Boatman discusses incorporating AI into classrooms, limiting course hours, and prioritizing the Unix class.
- Star likes the IT option for giving a taste of everything.
- Madison shares their perspective on cloud implementations, including the minimum knowledge required and the balance between developer and administrative responsibilities.
- Discusses challenges of managing cloud infrastructure.
- Everyone agrees that understanding cloud concepts is essential for programmers, even if they don't work in a cloud-related role.
- Star expresses frustration with lack of understanding of networking concepts in the industry.

Programming languages and development environments.

- Star discusses their experience with programming languages, including COBOL and Java, and the importance of debugging code.

- Karen Boatman and Delane discuss the importance of exposing students to Java syntax early on in their learning journey.
- Star wonders why Java was chosen over C# for the podcast, with Delane explaining that Java is a more straightforward option for beginners.
- Star mentions React Native, a cross-platform mobile app development framework, as an alternative to native Android and iOS development.
- Delane discusses the importance of Java programming for mobile app development, citing its widespread use in the industry and the need for a solid foundation in the language.

Mobile app development approaches and challenges.

- Star notes majority of industry uses hybrid solutions for mobile app development, while also acknowledging challenges in teaching native app development.

Mobile app development and native functionality.

- Redesigning app with commissioning options based on industry needs.
- Developers discuss native functionality and mobile app development for businesses.

Dotnet framework and MVC programming.

- Timothy compares ASP.NET web apps to Windows Forms, finding the former easier to work with due to the ability to write everything on a website.
- Zack agrees, noting that even small companies can benefit from using ASP.NET web apps, and that having that knowledge can make it easier to transition to Windows Forms if needed.
- Zack explains the importance of step-by-step learning in object-oriented programming.
- Student developers learn.NET core basics with MATLAB, then transition to Windows for more advanced work.

ASP.NET and its evolution in the industry.

- Star discusses the benefits of using.NET Core, including consistency with other Microsoft technologies and easier development.

	• Star notes that younger developers may lack exposure to older technologies like COBOL, making it challenging to adapt to new platforms. **Programming class structure and commenting code.** • Karen Boatman and Delane discuss the college's goal to retain students from fall to spring and collect data to determine the best class length for their programming classes. • The college wants to extend classroom times to accommodate more learning and work with students on their progress, but they need to address the college's concerns about the 16-week class length. • Zack emphasizes the importance of understanding code by writing it themselves, rather than copying and pasting. • Star and others discuss the importance of commenting on a program or task to help others understand it better in the future. **Curriculum redesign and feedback.** • Karen Boatman and others discuss curriculum redesign and feedback. **Computer science track and mobile app development.** • Delane expresses concerns about the relevance of the mobile app course for computer science students, suggesting it may not be practical or useful for their future careers. • Star suggests that a math lab or intro to MATLAB course could be more beneficial for computer science students, as it will be more relevant to their future careers in engineering and other fields. • Star discusses the cost and effort of maintaining a mobile app, mentioning security flaws and updates.
Other:	
Adjourn:	4:32pm

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Committee Chairperson: Karen Boatman	MEETING DATE: April 5, 2024	NEXT MEETING:
Recorder's Signature: Karen Boatman		
DEPARTMENTAL CHAIRPERSON SIGNATURE:	DATE:	
DIVISION DEAN'S SIGNATURE	DATE:	