Name : Salah Ud Din
Roll Number: 28
Assignment# 1
Submited to: Sir Asim Jalal

Introduction

Embark on a remarkable journey with Carnegie Mellon University's Master of Human-Computer Interaction (MHCI) program, a trailblazing initiative designed to shape the future pioneers of human-computer interaction, user experience design, and user-centered research.

A unique blend of service and design thinking is at the heart of the MHCI program, infusing the rigorous HCI curriculum with creativity and innovation, empowering graduates to lead the way in redefining human and technology interactions.

Spanning three dynamic semesters within a calendar year, from August to August, the MHCI program takes an interdisciplinary approach, bridging the realms of user experience, human-computer interaction, and beyond. Cohorts of diverse backgrounds, ranging from design to social science, business, and computer science, converge to create a vibrant learning community.

Guided by esteemed faculty members renowned for their contributions to HCI, the program encompasses a rich array of expertise in computer science, cognitive psychology, behavioral science, and design. Some faculty members bring invaluable industry experience, adding real-world perspectives to the mix, fostering an exciting interdisciplinary learning environment.

The program's pinnacle is the immersive seven-month Capstone project, an exhilarating opportunity for students to collaborate on research and design ventures, tackling tangible challenges presented by external industry clients.

Furthermore, the MHCI program proudly holds the distinguished STEM certification, testifying to its firm grounding in Science, Technology, Engineering, and Mathematics domains, cementing its relevance in today's ever-evolving technological landscape.

A Comprehensive Look at Core HCI Courses in the MHCI Program

1) Course 05-600: HCI Pro-Seminar: Communications in HCI
Immerse yourself in the art of effective communication within the realm of human-computer interaction. Delve into expert talks from both research and industry, unlocking insights into real-world HCI applications. This course hones your English writing prowess while nurturing essential skills in conflict management, teamwork, and active listening for seamless collaboration across diverse teams.

2) Course 05-610: User-Centered Research and Evaluation (UCRE)
Step into the captivating world of human-computer interaction through this illuminating course. Uncover a treasure trove of tools, techniques, and information sources related to HCI while honing a systematic approach to design. Analyze existing technology to distinguish between exceptional and flawed design, and practice HCI techniques through self-directed projects in a dedicated laboratory.

3) Course 05-651: Interaction Design Studio 1
Let your creativity soar as you embark on a journey of design thinking and fundamental practices in interaction design. Explore a human-centered design process involving research, concept generation,

prototyping, and refinement. Collaborate individually and within small teams to craft enthralling mobile information systems and interactive experiences. Gain expertise in design methodologies like sketching, storyboarding, wireframing, and prototyping, all without the need for coding. This course sets the stage for Interaction Design Studio 2 (05-650).

4) Course 05-650: Interaction Design Studio 2

Building upon the foundation laid in Interaction Design Studio 1 (05-651), this course invites you to apply design thinking and methodologies in a real-world context. Work collaboratively in teams to conduct guerrilla research, synthesize data, and cater to the needs of diverse stakeholders, designing cutting-edge mobile services and intelligent systems. Go beyond mere user interfaces to incorporate sensors, controls, and ubiquitous computing, and master the art of presenting your design concepts professionally for a stellar user experience design practice.

5) Choice: Course 05-630 or 05-631

a) Course 05-630: Programming Usable Interfaces (PUI)

Unlock the power of interactive ideas with this captivating course, where lectures blend seamlessly with an intensive programming lab and design studio. Let your creativity flow, express your ideas through functional prototypes, and discover the realms of human-computer interaction/interface design, iterative design, input/output techniques, and research topics shaping the future of user interfaces.

b) Course 05-631: Software Structures for User Interfaces (SSUI)

Embark on an adventure of building software to implement captivating user interfaces through SSUI. Dive deep into the core concepts and principles of UI development, exploring factors like input, output, application interface, and infrastructure. Familiarize yourself with typical patterns employed in UI implementation and understand how these aspects harmoniously function within well-structured object-oriented systems.

6) Course 05-671: HCI Project I (15-unit spring course) and 7) Course 05-672: HCI Project II (48-unit summer course)

Immerse yourself in experiential learning, the cornerstone of the MHCI program. These courses offer you a thrilling opportunity to work on substantial team projects, applying classroom knowledge to real-world problem-solving. Embrace the art of collaboration within multidisciplinary teams, developing indispensable skills in analysis, evaluation, implementation, and design. The project spans from the spring semester to the final summer semester, an exhilarating journey that prepares you for the challenges that lie ahead in the dynamic field of HCI.