# Sample Interview Questions and Answers (STAR Technique)

### 1. "Tell me about a technical project you worked on"

**Situation:** In ADP372s, I was tasked with creating an e-commerce website as my final project.

**Task:** My responsibility was to develop a fully functional front-end with product filtering, shopping cart, and user authentication features.

**Action:** I started by planning the website architecture using wireframes. Then I implemented HTML5 and CSS3 for the structure and styling, JavaScript for interactive features like the shopping cart, and local storage for user session management. I conducted thorough testing across different browsers.

**Result:** The project earned a 92% grade, and the lecturer highlighted my clean code and user-friendly interface. I also received positive feedback from classmates who tested the functionality.

#### 2. "Describe a time you debugged a complex code issue"

**Situation:** While working on a Java application for student management, the system kept crashing when generating reports for large classes.

**Task:** I needed to identify the root cause and implement a solution that would handle large datasets efficiently.

**Action:** I used systematic debugging by adding log statements to trace the execution flow. I discovered a memory leak in the report generation module where objects weren't being properly garbage collected. I refactored the code to use more efficient data structures and implemented proper resource cleanup.

**Result:** The application's performance improved by 60% and could handle datasets of 500+ students without crashing. This also taught me the importance of memory management in application development.

# 3. "Tell me about a time you worked in a team"

**Situation:** Our Database Systems course required a group project where four of us had to design and implement a library management system.

**Task:** As the team lead, I was responsible for coordinating tasks, ensuring timely completion, and integrating all modules.

**Action:** I organized weekly meetings using Microsoft Teams, created a shared project plan in Trello, and implemented version control with Git. When one member struggled with SQL queries, I organized a pair programming session to help them overcome the challenge.

**Result:** We completed the project two days ahead of schedule and received an 88% grade. The experience improved my leadership skills and taught me how to manage different skill levels within a team.

### 4. "Describe a situation where you had to learn something new quickly"

**Situation:** For my internship application, the company required knowledge of Python data analysis libraries, which I hadn't used extensively before.

**Task:** I needed to demonstrate proficiency in Pandas and NumPy within two weeks for the technical interview.

**Action:** I completed an intensive online course, practiced with real datasets from Kaggle, and built a small project analysing COVID-19 data trends. I also joined Python communities to ask specific questions when stuck.

**Result:** I successfully completed the technical interview and was offered the internship. I'm now comfortable using Python for data analysis tasks and continue to build on this skill.

#### 5. "Give an example of how you handle pressure or tight deadlines"

**Situation:** During finals week, I had three major project submissions due while preparing for four exams.

**Task:** I needed to manage my time effectively to deliver quality work for all commitments without compromising my health.

**Action:** I created a detailed schedule using time-blocking techniques, prioritized tasks based on deadlines and complexity, used the Pomodoro technique to maintain focus, and ensured I got adequate sleep and breaks.

**Result:** I submitted all projects on time with grades above 80% and performed well in my exams. This experience taught me valuable time management skills I now apply to all my work.

#### 6. "Describe a time you faced an unexpected technical challenge"

**Situation:** During a class presentation, my PowerPoint crashed minutes before I was due to present, and the backup file was corrupted.

**Task:** I needed to deliver my presentation effectively without the prepared slides.

**Action:** I quickly accessed my cloud backup using my phone, used the outline from my preparation notes to structure my talk mentally, and focused on engaging the audience with eye contact and clear explanations of key points.

**Result:** The presentation was successful, and the lecturer commended my ability to adapt under pressure. I received the same grade as I would have with slides and learned the importance of having multiple backup strategies.

# 7. "Tell me about a time you received constructive criticism"

**Situation:** After submitting my first major programming assignment, the lecturer provided detailed feedback about my code documentation and structure.

**Task:** I needed to improve my coding practices to meet professional standards for future projects.

**Action:** I studied the feedback carefully, researched proper documentation standards, implemented consistent commenting throughout my code, and adopted a modular programming approach. I also asked the lecturer to review my improvements.

**Result:** My subsequent assignments showed significant improvement, with documentation being highlighted as a strength. My final project received praise for its clean, well-documented code structure.