Name: _____ StudentID:_____

W3D5: Quiz

CS544 Enterprise Architecture

1. Describe why using messaging middle ware is more decoupled than using a web service:

Asynchronous, just drops the message off, doesn't know, doesn't care if the other side does something with it.

Very decoupled from the other side (not like synchronous that connects and waits)

2. Write a Spring Data Jpa repository for Pancake (whose primary key is of type Long)

```
public interface PancakeDao extends JpaRepository<Pancake, Long> {}
```

3. Write a Pancake service that uses the Pancake repository (also provide spring transactions)

```
@Service
@Transactional
public class PancakeService {
	@Autowired
	private PancakeDao pDao;

	public List<Pancake> getAll() {
		return pDao.findAll();
	}
	public Pancake get(Long id) {
		return pDao.findById(id).get();
	}
	public void save(Pancake p) {
		pDao.save(p);
	}
	public void delete(Long id) {
		pDao.deleteById(id);
	}
}
```

4. On the back of the page write a rest controller that uses the the Pancake service and has methods: getAll(), get(), add(), update() and delete(). Also include code for validation.

```
@RestController
public class PancakeRestController {
	@Autowired
	private PancakeService pService;

	@GetMapping("/pancakes")
	public List<Pancake> getAll() {
		return pService.getAll();
	}
	@GetMapping("/pancakes/{id}")
	public Pancake get(@PathVariable long id) {
		return pService.get(id);
	}
	@PostMapping("/pancakes")
	public RedirectView add(@RequestBody @Valid Pancake p) {
		pService.save(p);
		return new RedirectView("/pancakes/" + p.getId())
	}
	@PutMapping("/pancakes/{id}")
	public void update(@RequestBody @Valid Pancake p) {
		pService.save(p)
	}
	@DeleteMapping("/pancakes/{id}")
	public void delete(@PathVariable long id) {
		pService.delete(id);
	}
}
```