

# LBAW Practice Exam

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**Q1.** In a user story, who is considered the **primary** actor?

- A) The system administrator
- B) The developer implementing the feature
- C) The person who benefits from the feature
- D) The database

**Q2.** Which of the following is **not** typically a stakeholder in a software project?

- A) Competitor companies
- B) End-users
- C) Investors
- D) Regulatory agencies

**Q3.** Business rules should be:

- A) Hardcoded into the database schema
- B) Documented separately and implemented in application logic
- C) Always enforced through triggers
- D) Defined only by developers

**Q4.** Which of these **best** describes a labeling system in information architecture?

- A) The structure defining relationships between pieces of content
- B) The organization of pages and navigation paths
- C) The terminology used to categorize and describe content
- D) The mechanisms for users to search through content

**Q5.** A wireflow is best used to represent:

- A) A high-fidelity visual representation of a webpage
- B) The logical structure of a database
- C) The movement of users through different screens in an application
- D) The relations between database tables

**Q6.** The **main** purpose of a conceptual data model is to:

- A) Define the exact table structures in a database
- B) Capture high-level business requirements for data storage
- C) Enforce relational constraints
- D) Optimize database performance

**Q7.** Which of the following is a **characteristic** of a weak entity in data modeling?

- A) It has its own primary key
- B) It depends on a strong entity and has a foreign key reference
- C) It never has attributes of its own
- D) It is always implemented as a separate table without foreign keys

**Q8.** What **must** a relation in a relational schema have?

- A) At least one primary key
- B) A maximum of three foreign keys
- C) At least one unique constraint
- D) No null values

**Q9.** Which normalization form ensures **no** partial dependencies?

- A) 1NF
- B) 3NF
- C) BCNF
- D) 2NF

**Q10.** In generalization, a **subclass** inherits attributes from:

- A) The primary key of the database
- B) The parent (superclass) entity
- C) A foreign key reference
- D) Only attributes explicitly defined in the subclass

**Q11.** Which of the following actions **cannot** be performed by a trigger?

- A) Automatically inserting rows into another table
- B) Enforcing referential integrity
- C) Preventing the database from being updated
- D) Modifying the execution plan of a query

**Q12.** Hash indexes are generally **not** suitable for:

- A) Point lookups
- B) Range queries
- C) Exact matches
- D) Primary key lookups

**Q13.** A stored procedure is **different** from a user-defined function because:

- A) It cannot return values
- B) It does not require input parameters
- C) It can perform transactions and modify data
- D) It is always faster

**Q14.** Which protocol is used for **sending** emails?

- A) SMTP
- B) IMAP
- C) POP3
- D) FTP

**Q15.** In an Agile user story format, what is the correct structure?

- A) "As a [role], I want [feature] so that [benefit]."
- B) "The system must [action] when [event] occurs."
- C) "User [X] performs [Y] to achieve [Z]."
- D) "[Actor] interacts with [System] to produce [Outcome]."

**Q16.** A stakeholder requests a last-minute feature change that will significantly delay a project. What is the best course of action?

- A) Immediately implement the change
- B) Reject the request to avoid delays
- C) Assess the impact and present options
- D) Ignore the request unless a higher authority approves it

**Q17.** What is the **main** difference between business rules and functional requirements?

- A) Business rules are always technical, while functional requirements are not
- B) Functional requirements change frequently, while business rules remain constant
- C) Business rules must be stored in the database, while functional requirements must not
- D) Functional requirements describe how the system behaves, while business rules define constraints

**Q18.** Which information architecture element ensures **users can find relevant content efficiently**?

- A) Navigation system
- B) Organization system
- C) Labeling system
- D) Wireflow

**Q19.** A **wireframe** typically **does not** include:

- A) Color themes
- B) Page layout
- C) Content placement
- D) Navigation elements

**Q20.** In a conceptual data model, which of the following is **not** typically included?

- A) Entities
- B) Relationships
- C) Primary keys
- D) Attributes

**Q21.** Which of the following best describes **denormalization** in a database?

- A) Reducing redundancy by splitting tables
- B) Merging tables to optimize read performance
- C) Removing relationships between tables
- D) Eliminating functional dependencies

**Q22.** Given the relational schema:

`Student(SID, Name, Age)`  
`Enrollment(SID, CourseID, Grade)`

What type of relationship exists between `Student` and `Enrollment`?

- A) One-to-One
- B) One-to-Many
- C) Many-to-Many
- D) Self-referential

**Q23.** Which scenario **violates** referential integrity in a relational database?

- A) A table contains NULL values in a foreign key column
- B) A record references a non-existing primary key in another table
- C) A primary key column contains duplicate values
- D) An index is missing on a foreign key column

**Q24.** Which of the following correctly describes **mapping generalization** to a relational schema?

- A) Subclasses share the same table as the superclass
- B) Each subclass gets its own table with a foreign key reference to the superclass
- C) All attributes are merged into one large table
- D) Generalization does not apply to relational databases

**Q25.** What is a **major disadvantage** of using triggers in a database?

- A) They cannot modify data
- B) They can be difficult to debug and maintain
- C) They slow down read operations
- D) They do not work with relational databases

**Q26.** In the client-server model, which of the following is true?

- A) The server always initiates communication
- B) The client and server must always be on the same machine
- C) The client sends requests, and the server responds
- D) The server never stores any data

**Q27.** What is a **primary advantage** of the client-server paradigm?

- A) It eliminates network latency
- B) It provides centralized control and management
- C) It does not require an internet connection
- D) Clients and servers are always stateless

**Q28.** Which of the following is an example of a **static web document**?

- A) A PHP script that retrieves database records
- B) A JavaScript function that updates content dynamically
- C) An HTML page without any scripts
- D) A React application with API calls

**Q29.** Why might a developer choose **static web pages** over dynamic ones?

- A) They are faster to load and easier to cache
- B) They provide real-time data updates
- C) They allow for user-generated content
- D) They require an active database connection

**Q30.** Which of the following is an example of **asynchronous** interaction?

- A) Clicking a button and waiting for the entire page to reload
- B) Refreshing a page to load new data
- C) A user typing in a text box without any backend processing
- D) Submitting a form that updates a section of the page without reloading

**Q31.** What is a major **advantage** of using a web framework like Laravel?

- A) It eliminates all security vulnerabilities
- B) It removes the need to write database queries
- C) It provides built-in features to speed up development
- D) It requires no server configuration

**Q32.** What is a **potential disadvantage** of using frameworks?

- A) They do not support MVC architecture
- B) They have a steep learning curve and may introduce performance overhead
- C) They cannot be used with databases
- D) They are not widely adopted



**Q33.** In Laravel, which file is responsible for defining web routes?

- A) `routes/web.php`
- B) `app/Models/User.php`
- C) `resources/views/home.blade.php`
- D) `config/app.php`

**Q34.** In Laravel's MVC architecture, which component is responsible for database interactions?

- A) Model
- B) View
- C) Controller
- D) Route

**Q35.** What method is commonly used for **validating user input** in Laravel controllers?

- A) `$request->validate()`
- B) `check_input()`
- C) `sanitize_input()`
- D) `validate_form()`

**Q36.** How do you retrieve **all users** from a `users` table using Eloquent?

- A) `User::getAll();`
- B) `User::find();`
- C) `User::all();`
- D) `User::query();`

**Q37.** Which function defines a **one-to-many relationship** in Laravel models?

- A) `hasMany()`
- B) `belongsTo()`
- C) `hasOne()`
- D) `belongsToMany()`

**Q38.** In a **many-to-many** relationship, what type of table is required?

- A) A pivot table
- B) A foreign key table
- C) A unique table
- D) A temporary table

**Q39.** What is the **purpose** of Laravel policies?

- A) To define authorization logic for models
- B) To handle database queries
- C) To style web pages
- D) To define validation rules

**Q40.** How do you **register a policy** in Laravel?

- A) In `routes/web.php`
- B) In `app/Providers/AuthServiceProvider.php`
- C) In `config/auth.php`
- D) In `resources/views/layout.blade.php`

**Q41.** In a RESTful API, what HTTP method is typically used to update an existing resource?

- A) GET
- B) POST
- C) PUT
- D) DELETE

**Q42.** What makes a web document **dynamic**?

- A) It is written in HTML only
- B) It includes JavaScript or backend processing
- C) It loads instantly without processing
- D) It does not require a server

**Q43.** What is a key **disadvantage** of synchronous requests?

- A) They are more secure
- B) They can block the user interface
- C) They do not support AJAX
- D) They require WebSockets

**Q44.** Which of the following is **not** an advantage of using a framework?

- A) Increased security features
- B) Faster development time
- C) Absolute control over every low-level operation
- D) Built-in support for routing and templating

**Q45.** What is the purpose of Laravel **middleware**?

- A) To handle HTTP requests before they reach controllers
- B) To define database relationships
- C) To manage Blade templates

- D) To create Eloquent models

**Q46.** How do you **authorize** a user to perform an action using a policy in Laravel?

- A) `$user->can('update', Post::class);`
- B) `$user->authorize('update', Post::class);`
- C) `Gate::can('update', Post::class);`
- D) `Policy::check('update', Post::class);`

**Q47.** What is a key **disadvantage** of a purely server-based web architecture?

- A) Requires a high amount of client-side processing
- B) Increases the load on the server for every interaction
- C) Does not support database interactions
- D) Does not work with HTTPS

**Q48.** What is a **Single Page Application (SPA)**?

- A) A web application that loads new pages entirely on each interaction
- B) A web app that dynamically updates content without a full reload
- C) A static website with no dynamic features
- D) A mobile application

**Q49.** What is the key advantage of **Static Site Generation (SSG)**?

- A) Pages are generated in real-time
- B) Pages load faster because they are prebuilt
- C) Requires a database to function
- D) Only works with PHP

**Q50.** Which feature is **not** a requirement for a Progressive Web Application?

- A) Works offline
- B) Requires a native mobile app wrapper
- C) Uses a Service Worker
- D) Can be installed on a user's device

**Q51.** What is the purpose of the `<aside>` tag?

- A) Defines a secondary content section
- B) Displays inline code
- C) Creates a sidebar navigation
- D) Marks important text

**Q52.** Which **assistive technology** is primarily used by **visually impaired users**?

- A) Eye-tracking software
- B) Screen readers
- C) Alternative input devices
- D) Haptic feedback

**Q53.** What accessibility feature helps **users with mobility impairments** interact with web pages?

- A) Screen magnifiers
- B) Color contrast adjustments
- C) Keyboard navigation
- D) Closed captions

**Q54.** Which assistive technology would be most useful for someone with **low vision**?

- A) Alternative input devices
- B) Screen magnification software
- C) Closed captions
- D) Text-to-speech software

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**54 Questions → 20**

Correct Answer → **0.370**

Wrong Answer → **- 0.093**