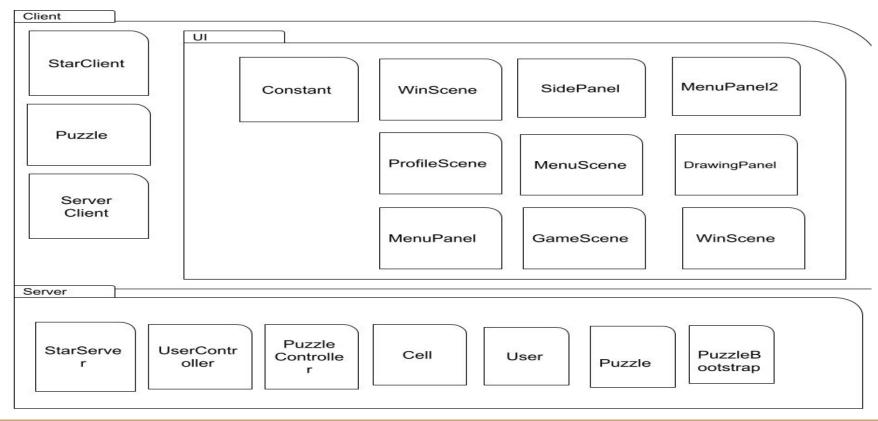
### Star Battle Game

By: Robert Marti, Emmanuel Obikwelu, and Stan Piddubnyy

# Package Diagram



## Class Diagram

#### ServerClient

- baseUrl: String - restTemplet: RestTemplet
- + «constructor» ServerClient() + getAnswer(puzzleID: String): int[][]
- + getLayout(puzzleID:

String): int[][]

#### DrawingPanel

- + g: GraphicsContext
- + boardd: int[][] - canvas: Canvas
- starlmage: Image
- Dotlmage: Image spotImage: Image
- lavout: int∏∏
- userLevel: int

- «constructor»DrawingPanel( userLevel: int)
- + Draw(): void
- + drawStar(row: int, col: int,
- g: GraphicsContext): void + drawDot(row: int, col: int, q:
- GraphicsContext): void + drawLayout(g:
- GraphicsContext): void
- mouseClicked(e: MouseEvent): void
- drawLayout(): void

#### client/Puzzle

- board: int∏∏ - answer: int∏∏
- region: int∏∏
- «constructor»Puzzle(Ans wer: int∏∏, Region: int∏∏) + placeStar(x: int, y: int):
- boolean
- + isCorrect(): boolean
- + placeEmpty(x: int, y:
- int): void
- + getBoard(): int[][]
- +VaildStar(x:int, y:int):
- boolean

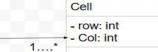
#### UserController

- «constructor»UserControlle r(repo: UserRepository)
- + getAll(): List<User>
- +get(userId: String): User
- +addUser(body: User):

User

#### server//Puzzle

- id: String -level: int
- gridSize: int numStars: int
- + «constructor»Puzzle(id: String,
- level: int, regions:
- List<List<Cell>>. solution:
- List<Cell>, gridSize: int, numStars: int)
- + getLayout(): int[][]
- + getAnswer(): int[[[] + getLevel(): int



User

- + userId: String
- «constructor»Cell()

+ getUserId(): String

#### **PuzzleController**

- + «constructor»PuzzleController(repo:
- PuzzleRepository)
- + getAll(): List<Puzzle> +getByld(id: String): Puzzle
- +getLayout(id: String): int∏∏
- +getAnswer(id: String): int∏∏
- +addPuzzle(body: Puzzle): Puzzle

## Future Changes

- If your project were to continue, what things might change?
  - a. Add a Leaderboard
  - b. User Solve Times
  - c. Add more design to it

- How did you implement your design to support future change?
  - a. Controller
  - b. Limited knowledge of Server

### Team

• What was your team's process (meetings, communication, etc.)?

What aspects of the process worked well?

What didn't worked well?

What would we change?

# What Would We Change About the Overall Design?

- a. Graphics
- b. Login page
- c. Actual server
- d. Score tracker

### Code demo:

