

MICHIGAN STATE

UNIVERSITY

Alpha Presentation

Railroad Arcade

The Capstone Experience

Team Union Pacific

Sarah Byrum

Matthew Howard

Caleb Howell

Gordon Huang

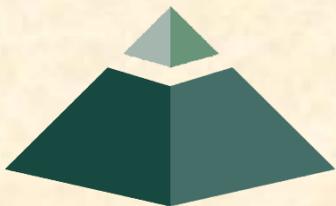
Margaret Wootten

Hongyu Yan

Department of Computer Science and Engineering

Michigan State University

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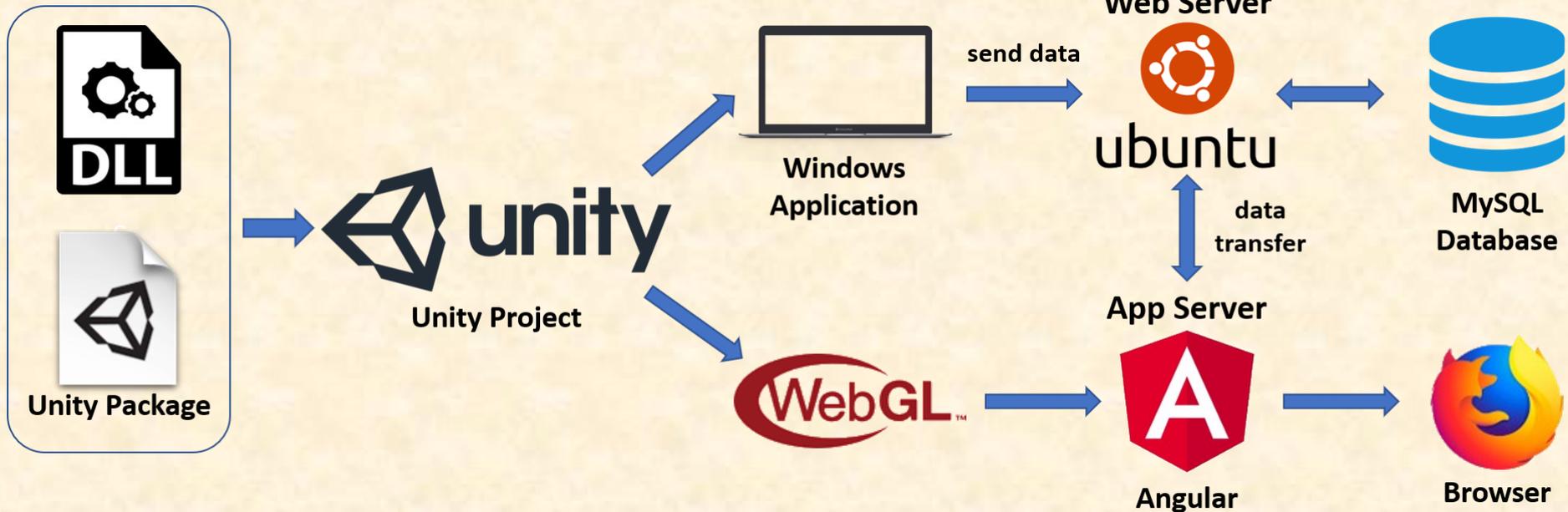
*From Students...
...to Professionals*

Project Overview

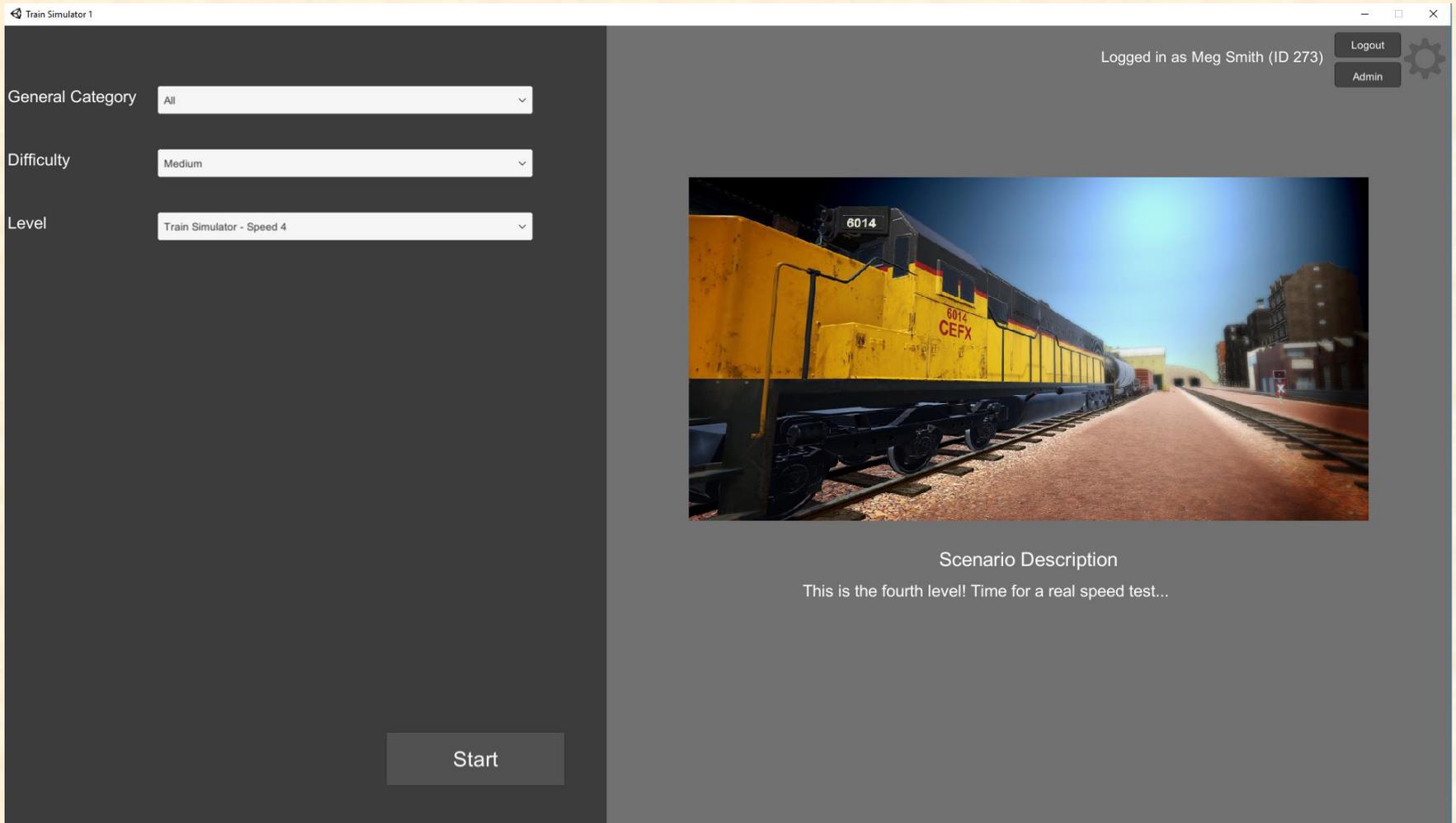
- Build reusable components to reduce game development time
 - Main Menu, Scoring, Login, PDF Generation
 - Different configurations for each
- Simulations available on Windows PC and Web
 - Developed as local application
 - Simplified upload process to web
- Create three or more games to demonstrate reusability and functionality



System Architecture



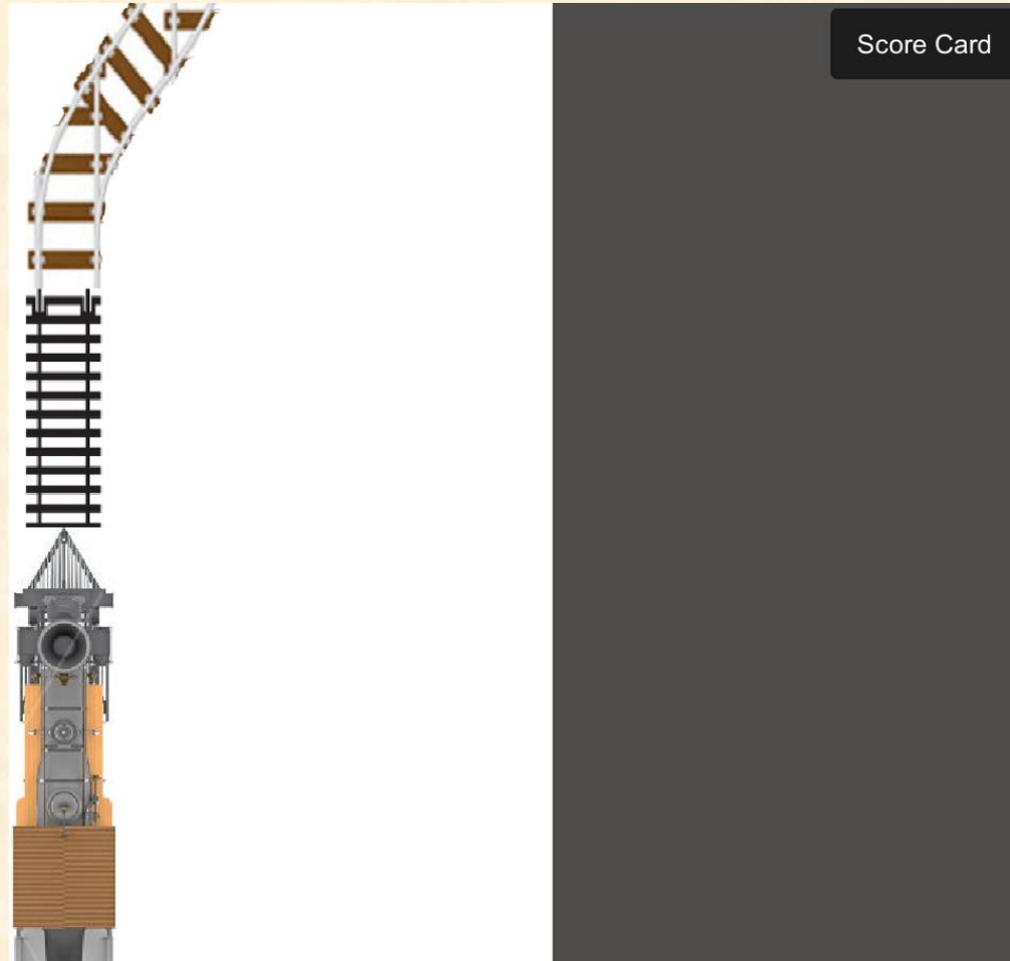
Sample Game - Menu



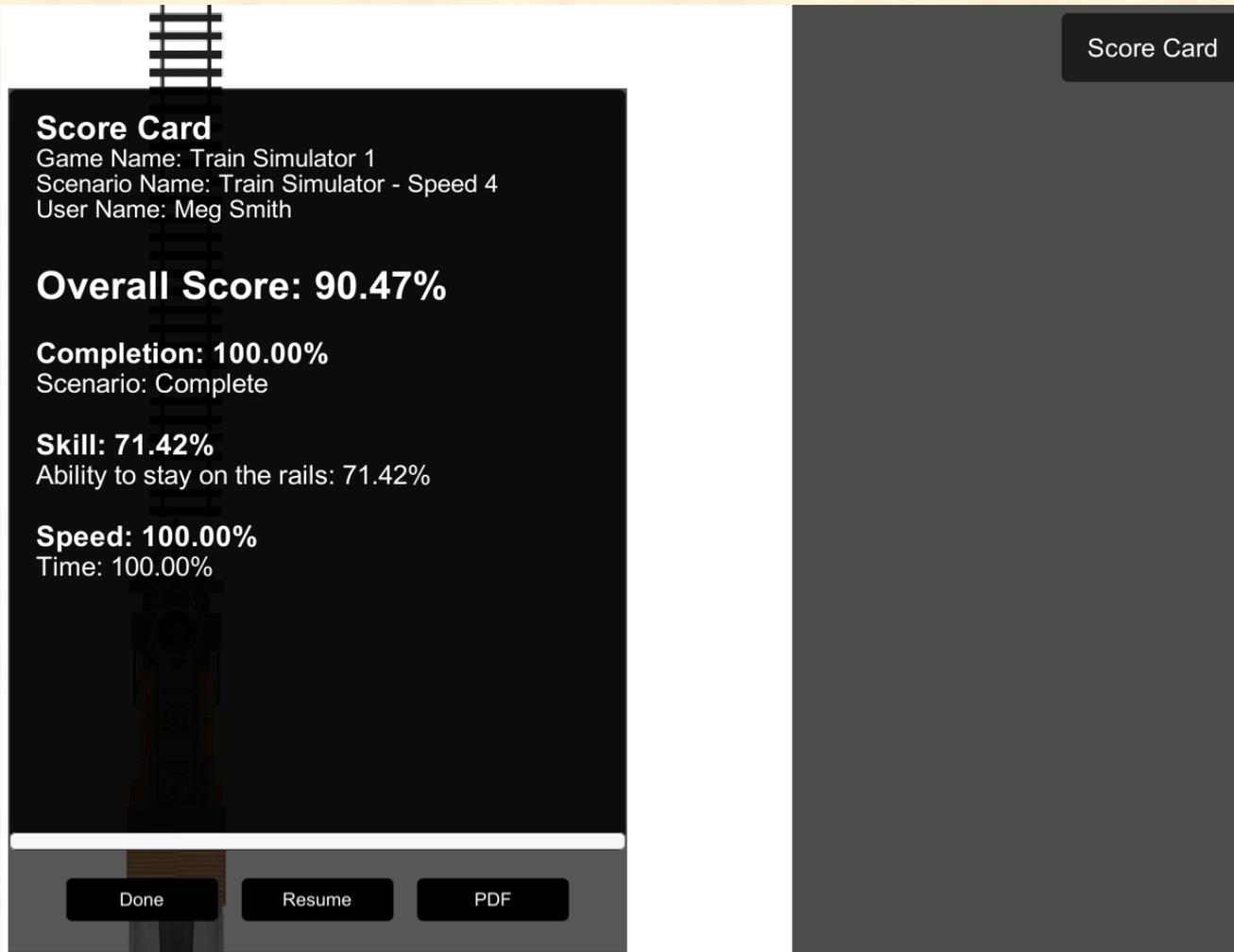
The screenshot shows a game menu interface for 'Train Simulator 1'. On the left, there are three dropdown menus: 'General Category' set to 'All', 'Difficulty' set to 'Medium', and 'Level' set to 'Train Simulator - Speed 4'. A 'Start' button is located at the bottom of this panel. On the right, the user is logged in as 'Meg Smith (ID 273)', with 'Logout' and 'Admin' buttons and a settings gear icon. Below the login information is a large image of a yellow locomotive with the number '6014' and 'CEFX' on its side, on a railway track. Underneath the image is the text 'Scenario Description' followed by 'This is the fourth level! Time for a real speed test...'. The window title bar at the top reads 'Train Simulator 1' and includes standard window controls.



Sample Game - During



Sample Game - End



The image shows a screenshot of a game interface. A dark grey score card overlay is positioned on the left side of the screen. The score card contains the following text: **Score Card**, Game Name: Train Simulator 1, Scenario Name: Train Simulator - Speed 4, User Name: Meg Smith, **Overall Score: 90.47%**, **Completion: 100.00%** (Scenario: Complete), **Skill: 71.42%** (Ability to stay on the rails: 71.42%), and **Speed: 100.00%** (Time: 100.00%). At the bottom of the score card are three buttons: Done, Resume, and PDF. On the right side of the screen, a dark grey panel has a 'Score Card' label in the top right corner. The background of the game shows a train on tracks.

Score Card
Game Name: Train Simulator 1
Scenario Name: Train Simulator - Speed 4
User Name: Meg Smith

Overall Score: 90.47%

Completion: 100.00%
Scenario: Complete

Skill: 71.42%
Ability to stay on the rails: 71.42%

Speed: 100.00%
Time: 100.00%

Done Resume PDF

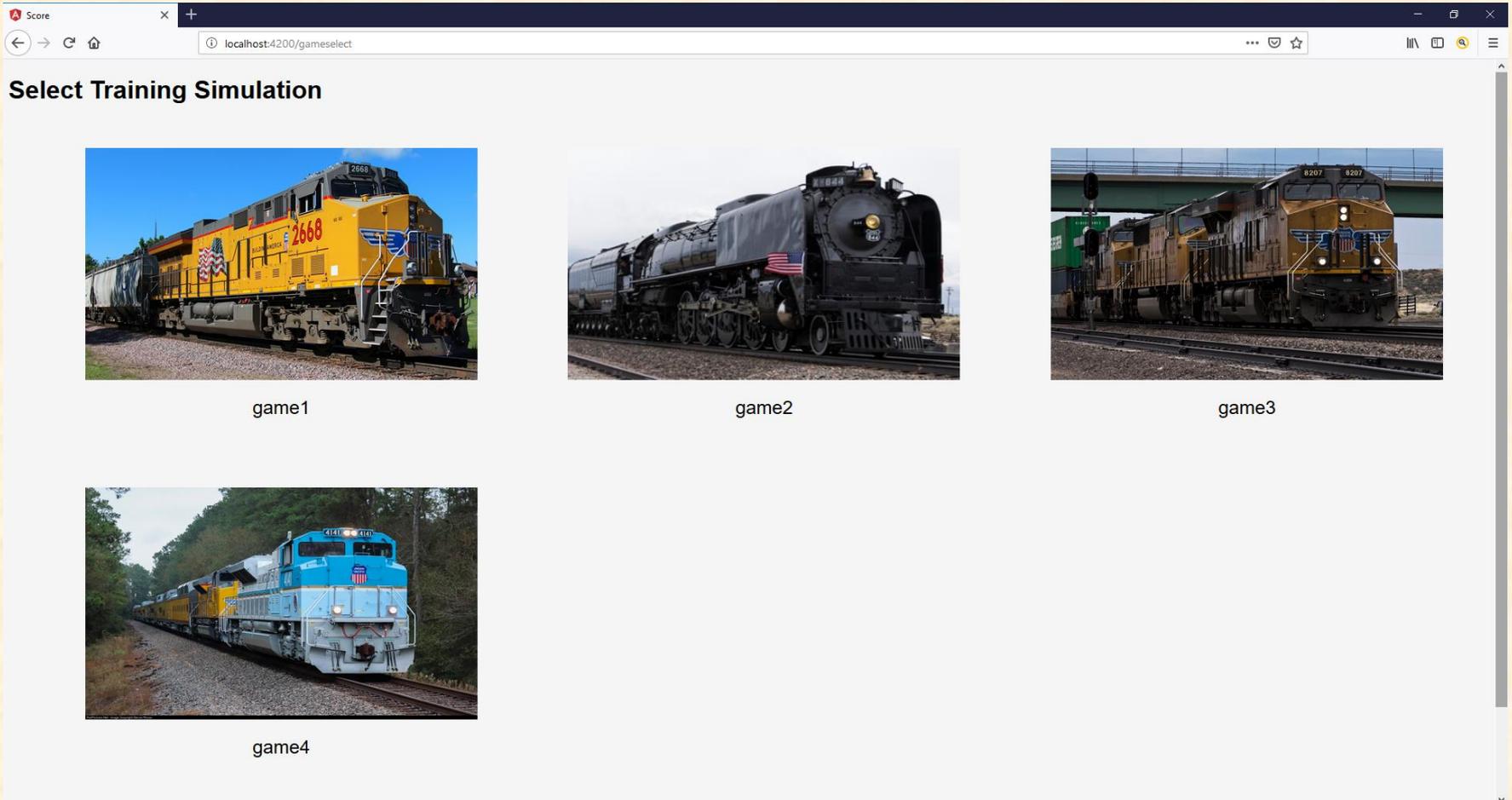
Score Card



Website – Game Selection

Score localhost:4200/gameselect

Select Training Simulation



game1

game2

game3

game4

What's left to do?

- Create and finalize sample games
 - Use creation to test each reusable component
 - Add additional games if time permits
- Finish the upload portion of the website
 - Increase functionality to outside of local
 - Upload finalized games to display on website
- Improve layout of website
- Restructure scorecard display for website
- Improve scaling and resolution compatibility



Questions?

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