

MICHIGAN STATE
UNIVERSITY

Beta Presentation

OPEN v2.0: Smart Order Picking

The Capstone Experience

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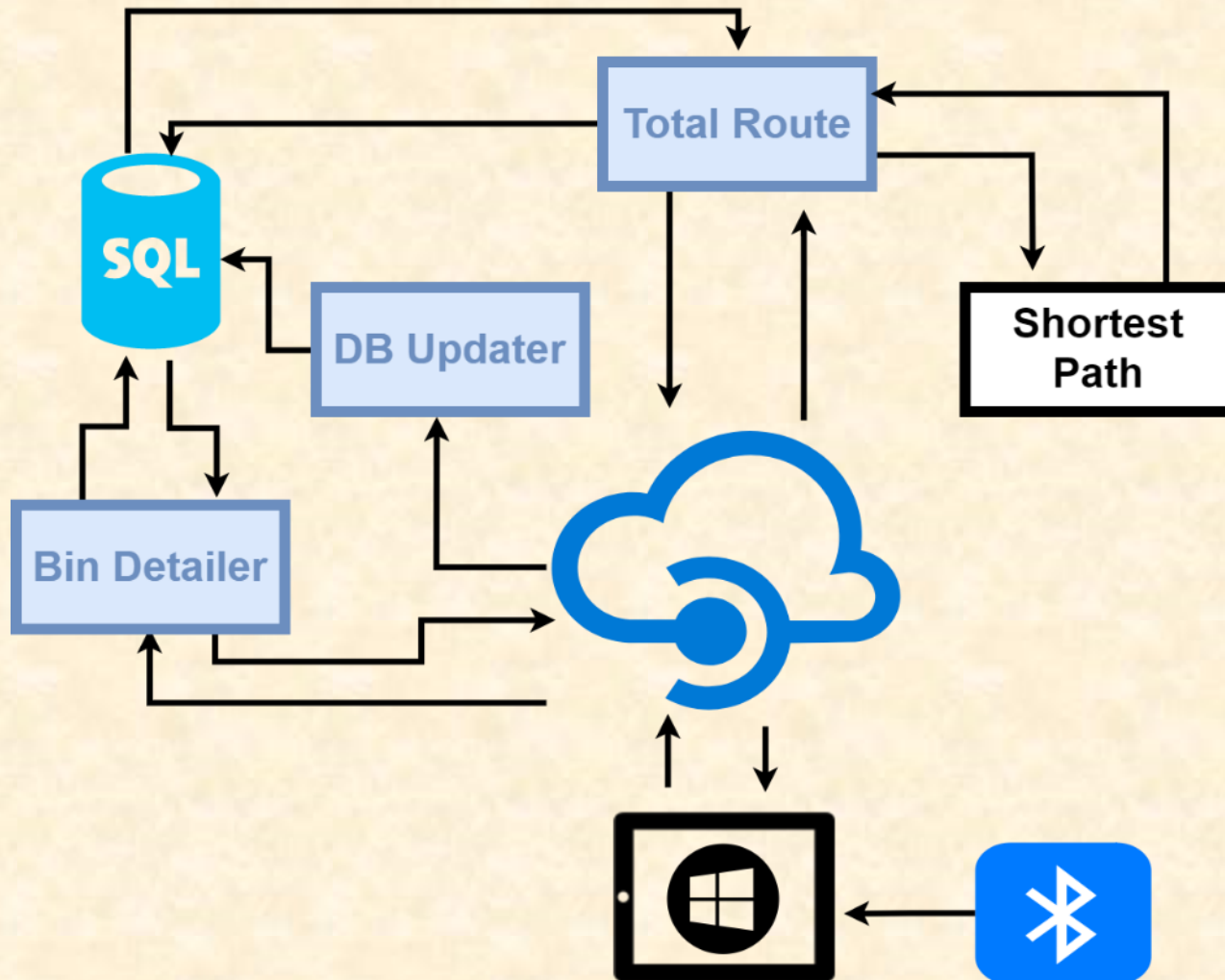


From Students...
...to Professionals

Project Overview

- Enhance Warehouse Order Picking Process
- Include Real Time Inventory Control
- Integrate with Current Application (O.P.E.N v2.0)

System Architecture

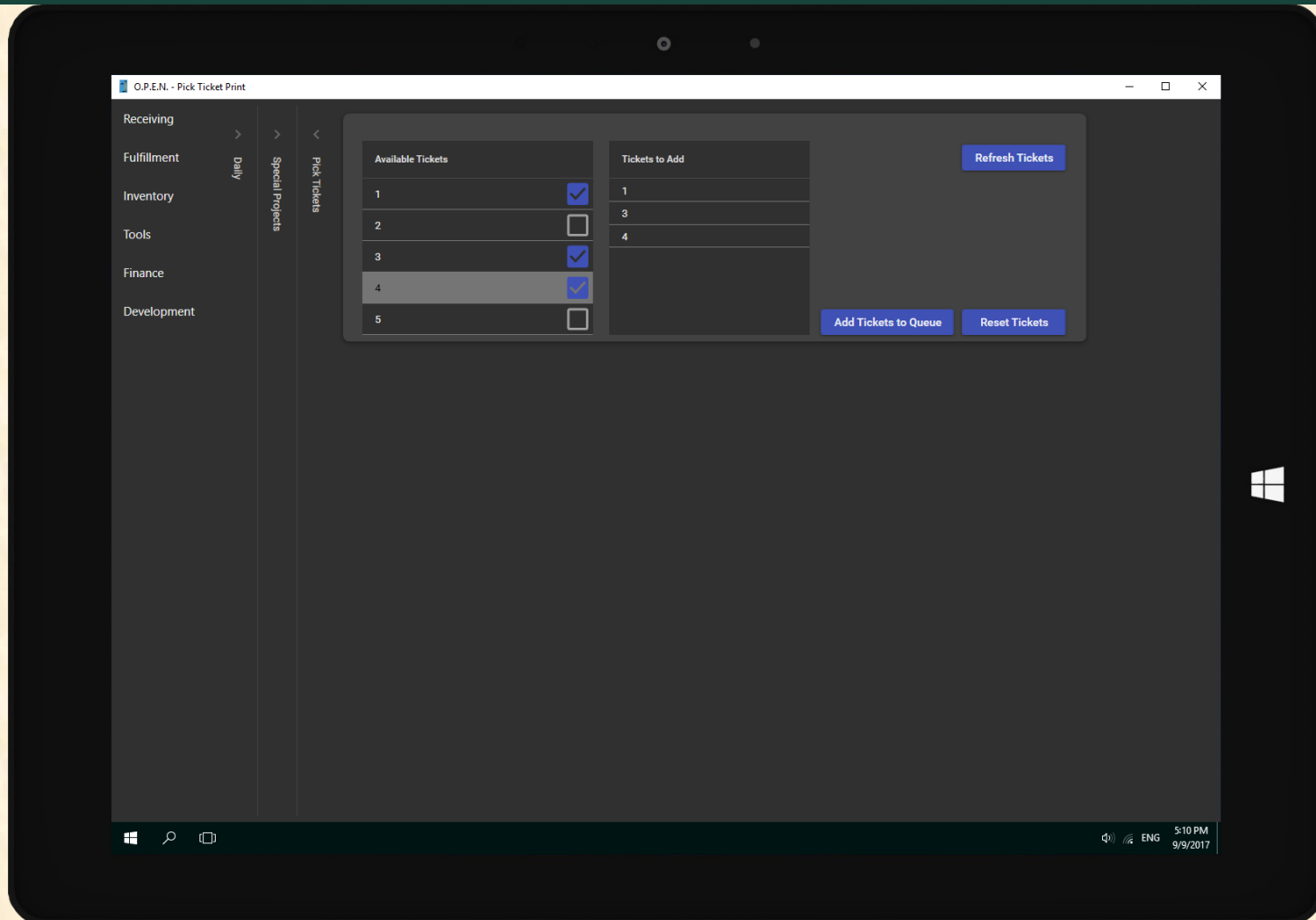


Administration Panel

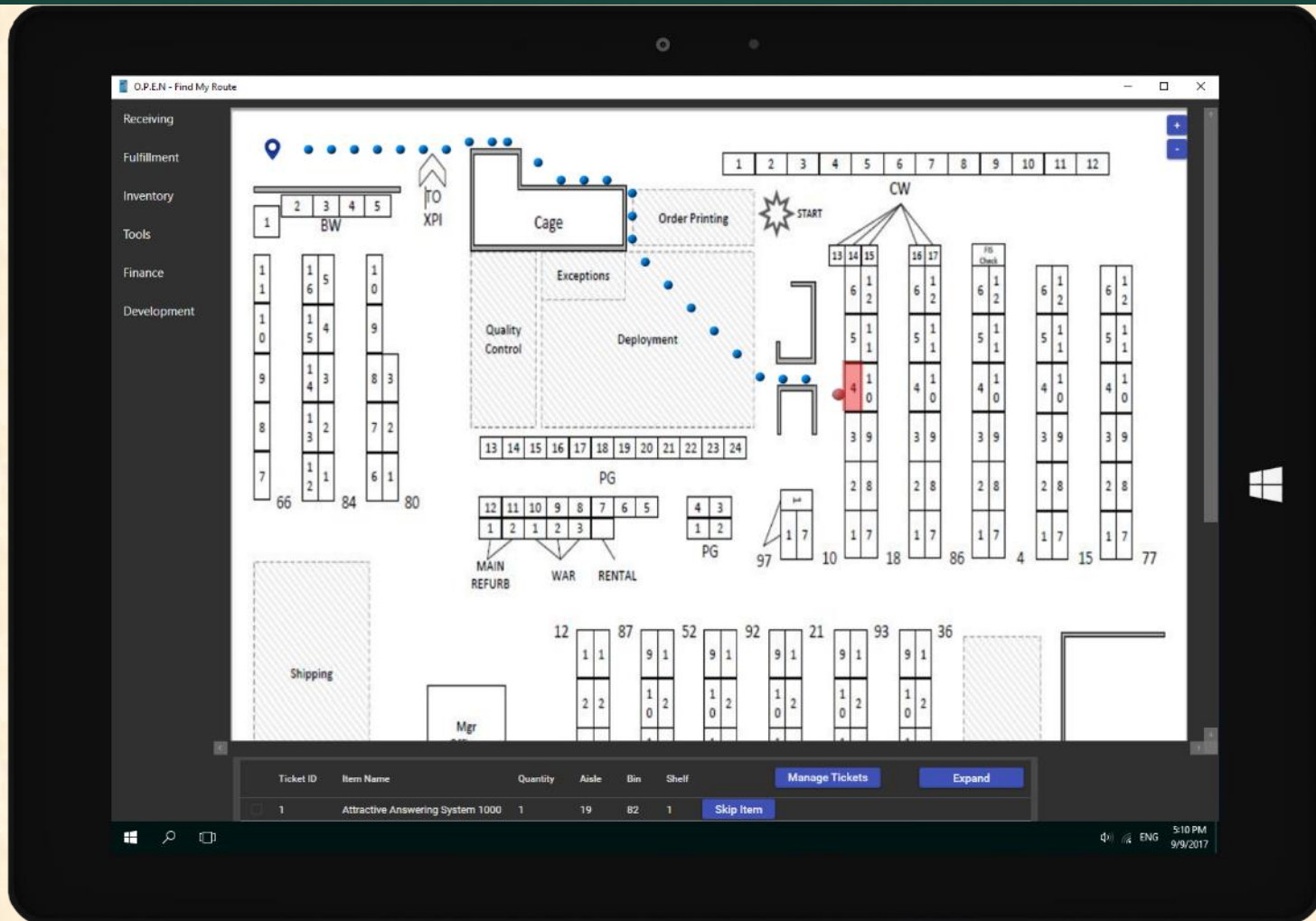
The screenshot displays the Administration Panel interface, which is used for managing a grid-based system. The interface is divided into several sections:

- Grid Configuration:** This section allows users to define the grid's dimensions and cell sizes. It includes input fields for Rows (125), X Dimension (ft) (250), Cell Dimension X (ft) (2), Select Dimension X (ft) (0.0164), Cols (125), Y Dimension (ft) (250), Cell Dimension Y (ft) (2), and Select Dimension Y (ft) (-0.0167). There are also buttons for 'Generate', 'DESELECT', 'SELECT', 'HIDE ENTITY', 'SHOW ENTITY', '100%', 'Export Grid', and 'Add Entity'.
- Import Grid:** This section provides options to import a grid from a file or an image. It includes buttons for 'Choose File', 'testGridAfterGrid_7.grid', 'Choose File', 'WarehouseMap.JPG', 'Load Grid', and 'Upload Grid'.
- Grid View:** The main area of the interface shows a large grid with various entities and their attributes. The grid is divided into several sections, each representing a different entity type. The entities are color-coded: red for 'Cage', 'Order Printing', 'Exceptions', and 'Quality Control'; blue for 'Cage', 'Order Printing', 'Exceptions', and 'Quality Control'; and green for 'Cage', 'Order Printing', 'Exceptions', and 'Quality Control'. The grid also displays numerical values for each entity, such as '1', '2', '3', '4', '5', '6', '7', '8', '9', '10', '11', '12', '13', '14', '15', '16', '17', '18', '19', '20', '21', '22', '23', '24', '25', '26', '27', '28', '29', '30', '31', '32', '33', '34', '35', '36', '37', '38', '39', '40', '41', '42', '43', '44', '45', '46', '47', '48', '49', '50', '51', '52', '53', '54', '55', '56', '57', '58', '59', '60', '61', '62', '63', '64', '65', '66', '67', '68', '69', '70', '71', '72', '73', '74', '75', '76', '77', '78', '79', '80', '81', '82', '83', '84', '85', '86', '87', '88', '89', '90', '91', '92', '93', '94', '95', '96', '97', '98', '99', '100', '101', '102', '103', '104', '105', '106', '107', '108', '109', '110', '111', '112', '113', '114', '115', '116', '117', '118', '119', '120', '121', '122', '123', '124', '125'.

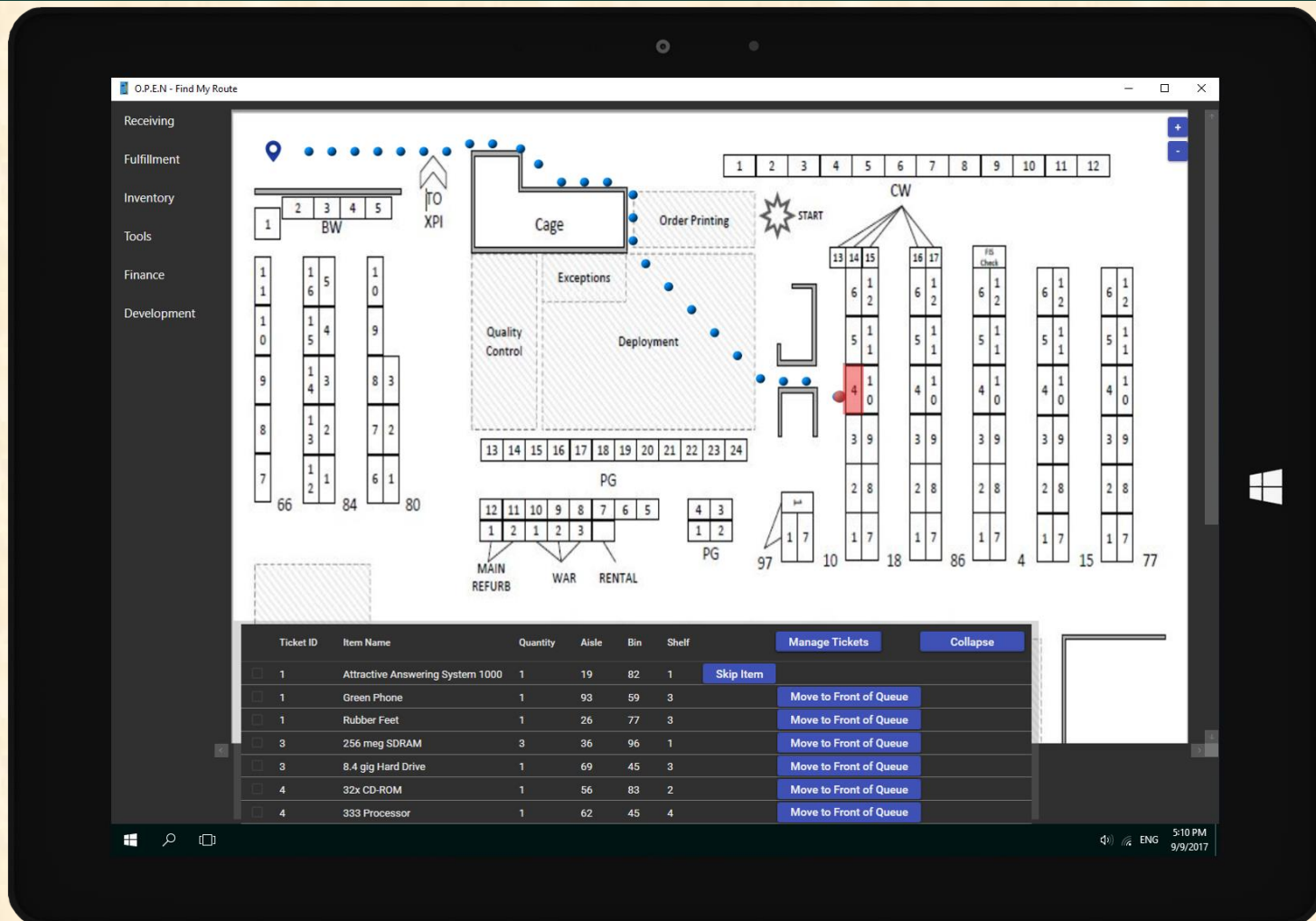
Pick Ticket Selection



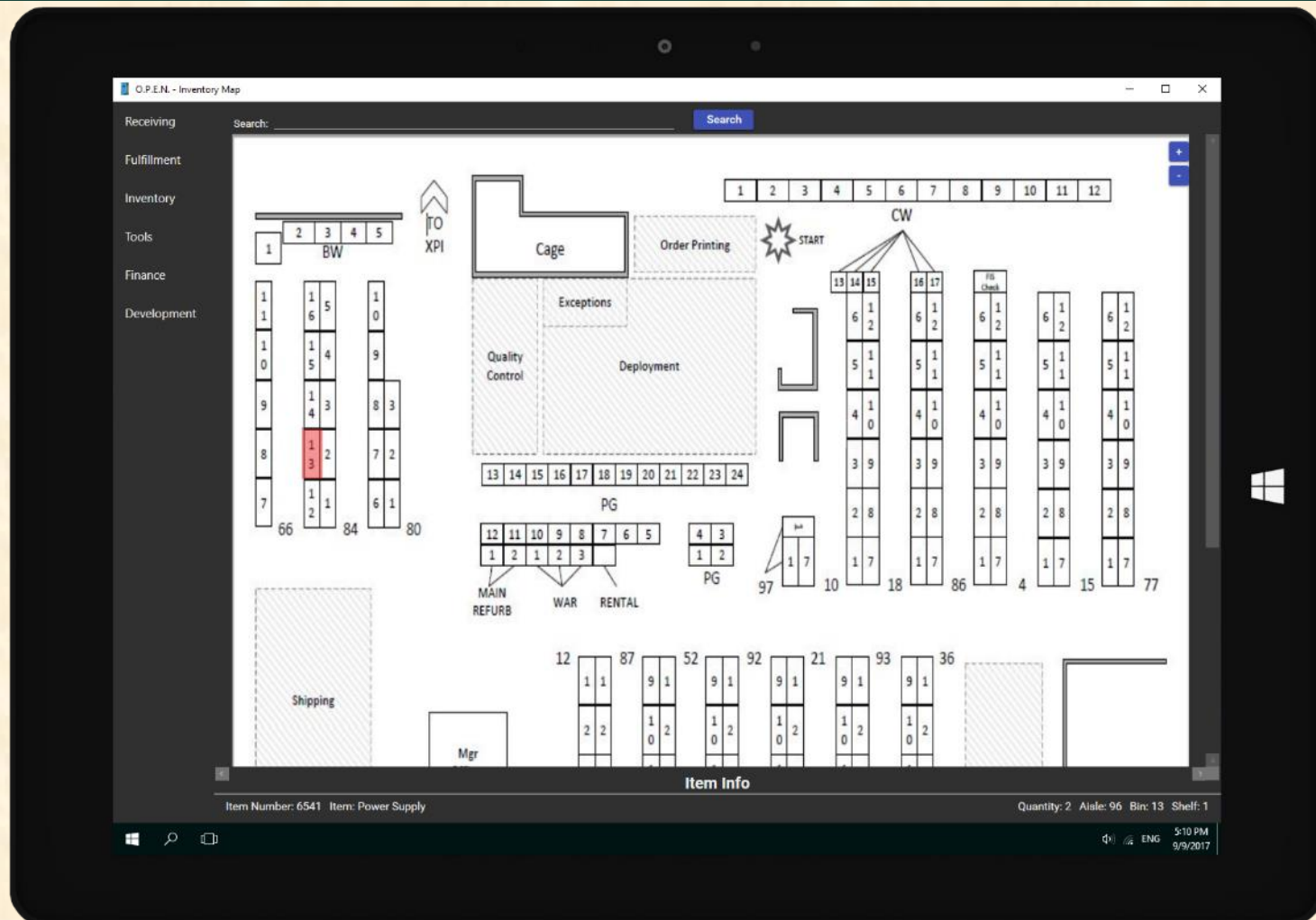
Map Order Routing



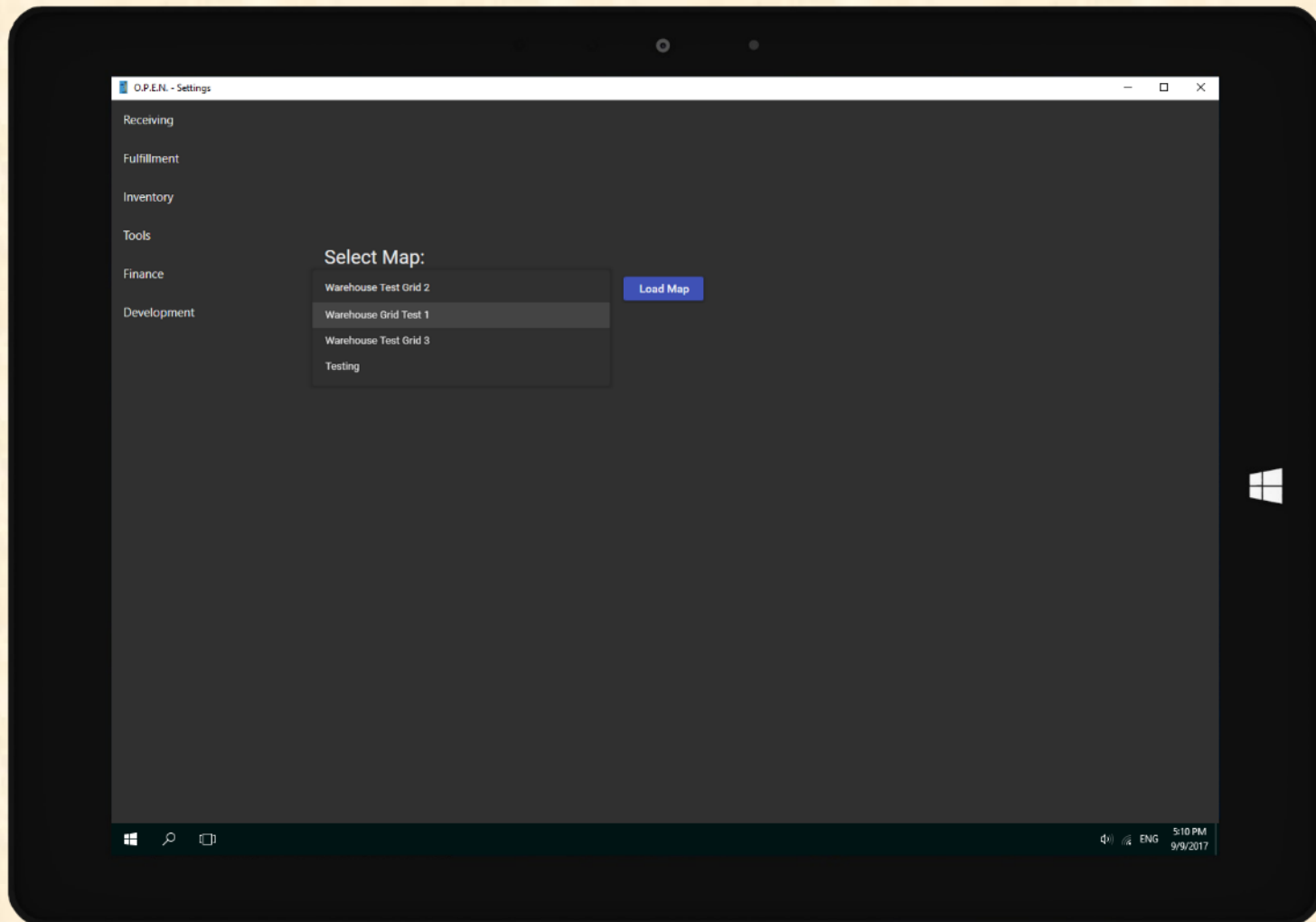
Map Order Fulfillment



Inventory Page



Map Caching and State Saving



What's left to do?

- Load test the server
- Get data on battery life of the tablet
- Data analytics
- Polish UI

Questions?

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