

FBA?????

FBA????????????????

1. ?????

1.1 ?????

FBA[????????????????????????]

- [] [] Vue 3 + Element Plus [] [] [] [] []
- [] [] Spring Boot [] [] [] RESTful API
- [] [] MySQL [] [] [] [] [] []
- [] [] [] [] API [] [] FBA [] []

1.2 ????????

flowchart TD

```
A[[]daily.vue] --> B[inventoryRptApi.js]
B --> C[InventoryReportController]
C --> D[FBAInventoryServiceImpl]
D --> E[InventoryReportHisMapper]
E --> F[ProductInfoService]
F --> G[MySQL[]]
G --> H[[]]
H --> I[[]]
```

2. ?????

2.1 ????????

```
└─ src/
   └─ views/
```

```

└─ amazon/
  └─ inventory/
    └─ fba/
      └─ daily.vue      # 日期选择器
└─ api/
  └─ amazon/
    └─ inventory/
      └─ inventoryRptApi.js # API接口
└─ components/
  └─ header/
    └─ group.vue      # 商品组选择器
    └─ datepicker.vue # 日期选择器

```

2.2 ??????????

2.2.1 ????????

```

<template>
  <div class="main-sty">
    <div class="con-header">
      <!-- 商品组 -->
      <el-row>
        <el-space>
          <Group @change="groupChange" defaultValue="" isproduct="ok"></Group>
          <Datepicker longtime="ok" ref="datepickers" @changedate="changedate" />
          <el-input v-model="queryParams.sku" @input="handleQuery" clearable
placeholder="商品SKU" style="width: 250px;" class="input-with-select" >
            <template #append>
              <el-button @click="handleQuery" >
                <el-icon class="ic-cen font-medium">
                  <search/>
                </el-icon>
              </el-button>
            </template>
          </el-input>
          <el-button type="primary" @click.stop="downloadExcel">导出</el-button>
        </el-space>
      </el-row>
    </div>
  </div>

```

```

<div class="con-body">
  <!-- 商品表 -->
  <GlobalTable ref="globalTable"
    show-summary
    :summary-method="getSummaries"
    :tableData="tableData" height="calc(100vh - 210px)"
@selectionChange='handleSelect'
    :defaultSort="{ prop: 'sku', order: 'ascending' }" @loadTable="loadTableData"
    :stripe="true"
    style="width: 100%;margin-bottom:16px;">
    <template #field>
      <!-- 商品 -->
      <el-table-column label="商品" prop="sku" width="200" fixed='left'
sortable="custom" show-overflow-tooltip>
        <template #default="scope">
          <div class="flex-center">
            <el-image v-if="scope.row.image" :src="scope.row.image"
class="img-40" width="40" height="40" ></el-image>
            <el-image v-else :src="$require('empty/noimage40.png')"
class="img-40" width="40" height="40" ></el-image>
            <div >
              <div>{{scope.row.pname}}</div>
              <p class="sku">{{scope.row.sku}} </p>
            </div>
          </div>
        </template>
      </el-table-column>
      <!-- 仓库 -->
      <el-table-column label="仓库" prop="warehouse" fixed='left' width="120"
sortable="custom" />
      <!-- 商品 -->
      <el-table-column :label="item.byday" :prop="item.field" v-for="item in
fieldlist" min-width="120" sortable="custom" />
    </template>
  </GlobalTable>
</div>
</div>
</template>

```

2.2.2 ???????

```

// 初始化
let state = reactive({
  tableData: {records:[],total:0},
  queryParams:{
    sku:"",
  },
  isload:true,
  fieldlist:[],
  summary:{},
})

// 初始化
function groupChange(obj){
  state.queryParams.groupid=obj.groupid;
  if(obj.marketplaceid=="IEU"){
    state.queryParams.warehouse="EU";
  }else{
    state.queryParams.warehouse=obj.marketplaceid;
  }
  handleQuery();
}

// 初始化
function changedate(dates){
  state.queryParams.fromdate=dates.start;
  state.queryParams.enddate=dates.end;
  if(state.isload==false){
    handleQuery();
  }
}

// 初始化
function handleQuery(){
  state.isload=false;
  // 初始化
  inventoryRptApi.getFBAInvDayDetailField(state.queryParams).then((res)=>{
    state.fieldlist=res.data;
    // 初始化
    globalTable.value.loadTable(state.queryParams);
  });
}

```

```

    });
}

// 初始化
function loadTableData(params){
    inventoryRptApi.getFBAInvDayDetail(params).then(res=>{
        state.tableData.records=res.data.records;
        state.tableData.total=res.data.total;
        // 初始化
        if(params.currentpage==1){
            if(res.data.total>0){
                state.summary=res.data.records[0].summary;
            }else{
                state.summary={};
            }
        }
    })
}

// 初始化
function getSummaries({columns,data}){
    var arr = [""];
    columns.forEach((item,index)=>{
        if(index>=2){
            arr[index]=state.summary[item.label];
        }
    })
    return arr
}

// 导出Excel
function downloadExcel(){
    inventoryRptApi.getFBAInvDayDetailExport(state.queryParams);
}

```

3. ?????

3.1 ????????

```

└─ src/
  └─ main/
    └─ java/
      └─ com/
        └─ wimoor/
          └─ amazon/
            └─ inventory/
              └─ controller/
                └─ InventoryReportController.java # []
              └─ service/
                └─ IFBAInventoryService.java # []
                └─ impl/
                  └─ FBAInventoryServiceImpl.java # []
            └─ mapper/
              └─ InventoryReportHisMapper.java # []

```

3.2 ??????????

3.2.1 ??????InventoryReportController.java?

```

// []
@PostMapping(value = "getFBAInvDayDetailField")
public Result<List<Map<String, String>>> getFBAInvDayDetailFieldAction(@RequestBody
InvDayDetailDTO query) {
    Map<String, Date> parameter = new HashMap<String, Date>();
    // []
    // ...
    List<Map<String, String>> fieldlist = iFBAInventoryService.getInvDaySumField(parameter);
    return Result.success(fieldlist);
}

// []
@PostMapping(value = "getFBAInvDayDetail")
public Result<IPage<Map<String, Object>>> getFBAInvDayDetailAction(@RequestBody
InvDayDetailDTO query) {
    Map<String, Object> parameter = new HashMap<String, Object>();
    // []
    // ...
    IPage<Map<String, Object>> list =

```

```

iFBAInventoryService.getFBAInvDayDetail(query,parameter);
// 返回数据
if(query.getCurrentpage()==1) {
    Map<String, Object> summary = iFBAInventoryService.getFBAInvDayDetailTotal(parameter);
    if(list!=null&&list.getRecords().size()>0&&summary!=null) {
        list.getRecords().get(0).put("summary", summary);
    }
}
return Result.success(list);
}

// 导出Excel
@PostMapping("getFBAInvDayDetailExport")
public void getFBAInvDayDetailExport(@RequestBody InvDayDetailDTO query, HttpServletResponse
response) {
    Map<String, Object> parameter = new HashMap<String, Object>();
    // 返回数据
    // ...
    try {
        SXSSFWorkbook workbook = new SXSSFWorkbook();
        response.setContentType("application/force-download");
        response.addHeader("Content-Disposition",
"attachment;fileName=FBAInvDayDetail"+System.currentTimeMillis() + ".xlsx");
        ServletOutputStream fOut = response.getOutputStream();
        iFBAInventoryService.downloadFBAInvDayDetail(workbook, parameter);
        workbook.write(fOut);
        workbook.close();
        fOut.flush();
        fOut.close();
    } catch (Exception e) {
        e.printStackTrace();
    }
}
}

```

3.2.2 导出ExcelFBAInventoryServiceImpl.java?

```

// 返回数据
@Override
public List<Map<String, String>> getInvDaySumField(Map<String, Date> parameter) {
    List<Map<String, String>> list = new LinkedList<Map<String, String>>();
}

```

```

Calendar calendar = Calendar.getInstance();
Date endDate = parameter.get("endDate");
Date beginDate = parameter.get("beginDate");
calendar.setTime(endDate);
// 日期遍历
for (Date step = calendar.getTime(); step.after(beginDate) || step.equals(beginDate);
    calendar.add(Calendar.DATE, -1), step = calendar.getTime()) {
    String field = GeneralUtil.formatDate(step, GeneralUtil.FMT_YMD);
    Map<String, String> map = new HashMap<String, String>();
    map.put("byday", field);
    map.put("field", "v" + field);
    list.add(map);
}
return list;
}

// 日期遍历
@Override
public IPage<Map<String, Object>> getFBAInvDayDetail(InvDayDetailDTO dto, Map<String, Object>
parameter) {
    // 日期遍历
    // ...
    List<Map<String, String>> fieldlist = getInvDaySumField(pmap);
    parameter.put("fieldlist", fieldlist);

    // 日期遍历
    List<Map<String, Object>> list = inventoryReportHisMapper.getFBAInvDayDetail(parameter);
    IPage<Map<String, Object>> pagelist = dto.getListPage(list);

    // 日期遍历
    if (pagelist != null && pagelist.getTotal() > 0) {
        // ...
        for (Map<String, Object> pagemap : pagelist.getRecords()) {
            String sku_p = pagemap.get("sku").toString();
            Map<String, Object> product = iProductInfoService.findNameAndPicture(sku_p,
marketplaceid, groupid);
            if (product != null) {
                pagemap.put("image", product.get("image"));
                pagemap.put("pname", product.get("name"));
            }
        }
    }
}

```

```

    }
}
return pagemap;
}

// 导出Excel
@Override
public void downloadFBAInvDayDetail(SXSSFWorkbook workbook, Map<String, Object> parameter) {
    // 初始化
    // ...
    List<Map<String, String>> fieldlist = getInvDaySumField(pmap);
    parameter.put("fieldlist", fieldlist);

    // 数据
    List<Map<String, Object>> list = inventoryReportHisMapper.getFBAInvDayDetail(parameter);

    // 导出Excel
    Map<String, Object> titlemap = new LinkedHashMap<String, Object>();
    titlemap.put("sku", "SKU");
    titlemap.put("warehouse", "");
    titlemap.put("pname", "");
    for(Map<String, String> itemfield:fieldlist) {
        titlemap.put(itemfield.get("field").toString(),itemfield.get("byday"));
    }

    // 导出Excel数据
    // ...
}

```

3.2.3 使用SQL

使用 SQL

```

SELECT
    sku,
    warehouse,
    CASE WHEN byday = '2023-01-01' THEN quantity ELSE 0 END AS v20230101,
    CASE WHEN byday = '2023-01-02' THEN quantity ELSE 0 END AS v20230102,
    -- ... 其他日期
    SUM(quantity) AS total

```

```

FROM
    inventory_report_his
WHERE
    byday BETWEEN #{beginDate} AND #{endDate}
    AND warehouse = #{warehouse}
    AND sku LIKE #{sku}
GROUP BY
    sku, warehouse

```

4. ??????

4.1 ??????

4.1.1 inventory_report_his???????

主键	数据类型	索引
id	BIGINT	主键 ID
sku	VARCHAR(50)	主键 SKU
warehouse	VARCHAR(20)	索引
byday	DATE	索引
quantity	INT	索引
shopid	VARCHAR(32)	主键 ID
groupid	VARCHAR(32)	索引 ID
created_at	DATETIME	索引
updated_at	DATETIME	索引

4.2 ?????

- 主键 索引 API 索引 FBA 索引
- 主键 索引
- 主键 索引 inventory_report_his
- 主键 索引 SQL 索引
- 主键 索引

5. API?????

5.1 ?????

URL	Method	Response
/api/v1/inventoryRpt/getFBAInvDayDetailField	POST	[[{"sku": "ABC123", "warehouse": "US", "pname": "Product Name", "image": "Product Image URL", "v20230101": 100, "v20230102": 90}]]
/api/v1/inventoryRpt/getFBAInvDayDetail	POST	[[{"sku": "ABC123", "warehouse": "US", "pname": "Product Name", "image": "Product Image URL", "v20230101": 100, "v20230102": 90}]]
/api/v1/inventoryRpt/getFBAInvDayDetailExport	POST	[[{"sku": "ABC123", "warehouse": "US", "pname": "Product Name", "image": "Product Image URL", "v20230101": 100, "v20230102": 90}]]

5.2 ??????InvDayDetailDTO?

Field	Type	Description
fromdate	String	YYYY-MM-DD
enddate	String	YYYY-MM-DD
groupid	String	ID
warehouse	String	
sku	String	SKU
currentpage	Integer	
pagesize	Integer	

5.3 ?????

```
{
  "code": 200,
  "msg": "success",
  "data": {
    "records": [
      {
        "sku": "ABC123",
        "warehouse": "US",
        "pname": "Product Name",
        "image": "Product Image URL",
        "v20230101": 100,
        "v20230102": 90,
        // ...
      }
    ]
  }
}
```

```

    "summary": {
      "2023-01-01": 1000,
      "2023-01-02": 900,
      // ...
    }
  ],
  "total": 100,
  "size": 20,
  "current": 1
}
}

```

6. ??????

6.1 ????????

- `v-for` `SQL`
- `SQL`
- `SQL`

6.2 ????????

- `GlobalTable`
- `SQL` `CASE WHEN`
- `SXSSFWorkbook` `Excel`

6.3 ????????

```

// 
Calendar calendar = Calendar.getInstance();
calendar.setTime(endDate);
for (Date step = calendar.getTime(); step.after(beginDate) || step.equals(beginDate);
    calendar.add(Calendar.DATE, -1), step = calendar.getTime()) {
  // 
  // ...
}

```

6.4 ??????

- 面试题 面试题 Element Plus 的 summary-method 如何实现的
- 面试题 如何自定义 Element Plus 的 summary 方法
- 面试题 如何自定义 Element Plus 的 summary 方法

7. ?????

7.1 ?????

1. 面试题 如何自定义 Element Plus 的 summary 方法
2. 面试题 如何自定义 Element Plus 的 summary 方法
3. 面试题 如何自定义 Element Plus 的 summary 方法

7.2 ?????

1. 面试题 如何自定义 Element Plus 的 summary 方法
2. 面试题 如何自定义 Element Plus 的 summary 方法
3. 面试题 SQL 如何自定义 Element Plus 的 summary 方法
4. 面试题 如何自定义 Element Plus 的 summary 方法

7.3 ?????

1. 面试题 如何自定义 Element Plus 的 summary 方法
2. 面试题 如何自定义 Element Plus 的 summary 方法
3. 面试题 如何自定义 Element Plus 的 summary 方法

8. ?????

8.1 ?????

1. 面试题 如何自定义 Element Plus 的 summary 方法
2. 面试题 如何自定义 Element Plus 的 summary 方法
3. SQL 面试题 如何自定义 Element Plus 的 summary 方法

8.2 ?????

1. 面试题 如何自定义 Element Plus 的 summary 方法

