

```

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"content": "class HotTipsTracker:\n \"\"\"Logs reported opportunities to a SQLite database.\"\"\"\n def __init__(self,
db_path: Optional[str] = None, config: Optional[Dict[str, Any]] = None):\n self.db = FortunaDB(db_path) if db_path else
FortunaDB()\n self.config = config or {}\n self.logger = structlog.get_logger(self.__class__.__name__)\n\n async def
log_tips(self, races: List[Race]):\n if not races:\n return\n\n await self.db.initialize()\n now = datetime.now(EASTERN)\n
report_date = to_storage_format(now)\n new_tips = []\n already_handled_soft_keys = set()\n\n # Future cutoff relaxed to allow
advance tips\n future_limit = now + timedelta(hours=24)\n\n for r in races:\n # Only store \"Best Bets\" (Goldmine, BET NOW,
or You Might Like)\n # These are marked in metadata by the analyzer.\n # FIX_09: Also include pure superfecta keybox plays\n
if not r.metadata.get('is_best_bet') and not r.metadata.get('is_goldmine') and not r.metadata.get('is_superfecta_key'):\n
continue\n\n # Trustworthiness Airlock Safeguard (Council of Superbrains Directive)\n active_runners = [run for run in
r.runners if not run.scratched]\n total_active = len(active_runners)\n\n # Ensure trustworthy odds exist before logging\n if
r.metadata.get('predicted_2nd_fav_odds') is None:\n continue\n\n if total_active > 0:\n trustworthy_count = sum(1 for run in
active_runners if run.metadata.get(\"odds_source_trustworthy\"))\n trust_ratio = trustworthy_count / total_active\n # Relaxed
to match SimplySuccessAnalyzer config (GPT5 alignment)\n # BUG-2 Fix: Align with expected config key\n min_trust =
self.config.get(\"analysis\", {})).get(\"simply_success_trust_min\", 0.25)\n if trust_ratio < min_trust:\n
self.logger.warning(\"Rejecting race with low trust_ratio for DB logging\", venue=r.venue, race=r.race_number,
trust_ratio=round(trust_ratio, 2), required=min_trust)\n continue\n\n st = r.start_time\n if isinstance(st, str):\n try: st =
from_storage_format(st.replace('Z', '+00:00'))\n except Exception: continue\n if st.tzinfo is None: st =
st.replace(tzinfo=EASTERN)\n\n # Reject races too far in the future\n # BUG-4 Fix: Expand timing gate to 60m to prevent
dropping late-detected goldmines\n if st > future_limit or st < now - timedelta(minutes=60):\n self.logger.debug(\"Rejecting
far-future or ancient race\", venue=r.venue, start_time=st)\n continue\n\n # BUG-12: Secondary soft-key dedup guard\n soft_key
= f\"{get_canonical_venue(r.venue)}|{r.race_number}|{st.strftime('%Y%m%d')}\"\n\n if soft_key in already_handled_soft_keys:\n
self.logger.debug(\"Skipping duplicate play (soft key match)\", soft_key=soft_key)\n continue\n
already_handled_soft_keys.add(soft_key)\n\n is_goldmine = r.metadata.get('is_goldmine', False)\n gap12 =
r.metadata.get('lGap2', 0.0)\n\n tip_data = {\n \"report_date\": report_date,\n \"race_id\": r.id,\n \"venue\": r.venue,\n
\"race_number\": r.race_number,\n \"start_time\": to_storage_format(r.start_time) if isinstance(r.start_time, datetime) else
str(r.start_time),\n \"is_goldmine\": is_goldmine,\n \"source\": r.source,\n \"lGap2\": gap12,\n \"discipline\":
r.discipline,\n \"top_five\": r.top_five_numbers,\n \"selection_number\": r.metadata.get('selection_number'),\n
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None),\n \"condition_modifier\": r.metadata.get('condition_modifier'),\n \"qualification_grade\":
r.metadata.get('qualification_grade'),\n \"composite_score\": r.metadata.get('composite_score'),\n \"is_best_bet\":
r.metadata.get('is_best_bet', False),\n \"is_superfecta_key\": r.metadata.get('is_superfecta_key', False),\n
\"superfecta_key_number\": r.metadata.get('superfecta_key_number'),\n \"superfecta_key_name\":
r.metadata.get('superfecta_key_name')\n }\n new_tips.append(tip_data)\n\n try:\n # Cap the batch size to avoid performance
degradation (GPT5 Improvement)\n if len(new_tips) > 100:\n self.logger.info(\"Capping large tips batch\",
original_count=len(new_tips), capped_at=100)\n new_tips = new_tips[:100]\n\n await self.db.log_tips(new_tips)\n
self.logger.info(\"Hot tips processed\", count=len(new_tips))\n except Exception as e:\n self.logger.error(\"Failed to log hot
tips\", error=str(e))\n\n
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----- \n\n#! /usr/bin/env python3\n"
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monitors racing data from multiple adapters and identifies\nbetting opportunities based on:\n1. Second favorite odds >= 4.0
decimal\n2. Races under 120 minutes to post (MTP)\n3. Superfecta availability preferred\n\nUsage:\n python
favorite_to_place_monitor.py [--date YYMMDD] [--refresh-interval 30]\n\"\"\" \n\n"
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race_number: int\n field_size: int\n superfecta_offered: bool\n adapter: str\n start_time: datetime\n mtp: Optional[int] =
None\n # Minutes to post\n second_fav_odds: Optional[float] = None\n second_fav_name: Optional[str] = None\n selection_number:
Optional[int] = None\n favorite_odds: Optional[float] = None\n favorite_name: Optional[str] = None\n top_five_numbers:
Optional[str] = None\n gap12: float = 0.0\n is_goldmine: bool = False\n is_best_bet: bool = False\n is_superfecta_key: bool =
False\n superfecta_key_number: Optional[int] = None\n superfecta_key_name: Optional[str] = None\n superfecta_box_numbers:
List[int] = Field(default_factory=list)\n\n def to_dict(self) -> dict:\n \"\"\"Convert to dictionary for JSON
serialization.\"\"\"\n return {\n \"discipline\": self.discipline,\n \"track\": self.track,\n \"race_number\":
self.race_number,\n \"field_size\": self.field_size,\n \"superfecta_offered\": self.superfecta_offered,\n \"adapter\":
self.adapter,\n \"start_time\": to_storage_format(self.start_time),\n \"mtp\": self.mtp,\n \"second_fav_odds\":
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"is_superfecta_key": self.is_superfecta_key,\n \"superfecta_key_number\": self.superfecta_key_number,\n
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"content": "def get_discovery_adapter_classes() -> List[Type[BaseAdapterV3]]:\n \"\"\"Recursively discovers all discovery
adapter classes (cached for performance - GPT5 Improvement).\"\"\"\n def get_all_subclasses(cls):\n return
set(cls.__subclasses__()).union([s for c in cls.__subclasses__() for s in get_all_subclasses(c)])\n )\n\n return [\n c for c
in get_all_subclasses(BaseAdapterV3)\n if not getattr(c, \"__abstractmethods__\", None)\n and getattr(c, \"ADAPTER_TYPE\",
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"content": "class FavoriteToPlaceMonitor:\n \"\"\"Monitor for favorite-to-place betting opportunities.\"\"\"\n\n def
__init__(self, target_dates: Optional[List[str]] = None, refresh_interval: int = 30, config: Optional[Dict] = None):\n
\"\"\"Initialize monitor.\n\n Args:\n target_dates: Dates to fetch races for (YYMMDD), defaults to today + tomorrow\n
refresh_interval: Seconds between refreshes for BET NOW list\n\n \"\"\"\n\n if target_dates:\n self.target_dates = target_dates\n
else:\n today = datetime.now(EASTERN)\n tomorrow = today + timedelta(days=1)\n self.target_dates =
[today.strftime(DATE_FORMAT), tomorrow.strftime(DATE_FORMAT)]\n\n self.refresh_interval = refresh_interval\n self.config =
config or {}\n\n self.all_races: List[RaceSummary] = []\n self.adapters: List = []\n self.logger =
structlog.get_logger(self.__class__.__name__)\n self.tracker = HotTipsTracker(config=self.config)\n\n async def
initialize_adapters(self, adapter_names: Optional[List[str]] = None):\n \"\"\"Initialize all adapters, optionally filtered by
name.\"\"\"\n\n all_discovery_classes = get_discovery_adapter_classes()\n\n classes_to_init = all_discovery_classes\n if
adapter_names:\n classes_to_init = [c for c in all_discovery_classes if c.__name__ in adapter_names or getattr(c,
\"SOURCE_NAME\", \"\") in adapter_names]\n\n self.logger.info(\"Initializing adapters\", count=len(classes_to_init))\n\n # Get
adapter-specific configs from global config (GPT5 Improvement)\n\n adapter_configs = self.config.get(\"adapters\", {})\n\n for
adapter_class in classes_to_init:\n try:\n name = adapter_class.SOURCE_NAME if hasattr(adapter_class, \"SOURCE_NAME\") else
adapter_class.__name__\n specific_config = adapter_configs.get(name, {}).copy() # Use copy to avoid shared mutation\n\n # Merge
with basic region config\n\n specific_config.update({\"region\": self.config.get(\"region\")})\n\n adapter =
adapter_class(config=specific_config)\n\n self.adapters.append(adapter)\n\n self.logger.debug(\"Adapter initialized\",
adapter=adapter_class.__name__)\n\n except Exception as e:\n self.logger.error(\"Adapter initialization failed\",
adapter=adapter_class.__name__, error=str(e))\n\n self.logger.info(\"Adapters initialization complete\",
initialized=len(self.adapters))\n\n async def fetch_all_races(self) -> List[Tuple[Race, str]]:\n \"\"\"Fetch races from all
adapters.\"\"\"\n\n self.logger.info(\"Fetching races\", dates=self.target_dates)\n\n all_races_with_adapters = []\n\n # Run
fetches in parallel for speed\n\n async def fetch_one(adapter, date_str):\n name = adapter.__class__.__name__\n try:\n races =
await adapter.get_races(date_str)\n\n self.logger.info(\"Fetch complete\", adapter=name, date=date_str, count=len(races))\n
return [(r, name) for r in races]\n\n except Exception as e:\n self.logger.error(\"Fetch failed\", adapter=name, date=date_str,
error=str(e))\n\n return []\n\n fetch_tasks = []\n\n for d in self.target_dates:\n for a in self.adapters:\n
fetch_tasks.append(fetch_one(a, d))\n\n results = await asyncio.gather(*fetch_tasks)\n\n for r_list in results:\n
all_races_with_adapters.extend(r_list)\n\n self.logger.info(\"Total races fetched\", total=len(all_races_with_adapters))\n\n
return all_races_with_adapters\n\n def _get_discipline_code(self, race: Race) -> str:\n \"\"\"Get discipline code
(T/H/G).\"\"\"\n\n if not race.discipline:\n return \"T\"\n\n d = race.discipline.lower()\n\n if \"harness\" in d or
\"standardbred\" in d: return \"H\"\n\n if \"greyhound\" in d or \"dog\" in d: return \"G\"\n\n return \"T\"\n\n def
_calculate_field_size(self, race: Race) -> int:\n \"\"\"Calculate active field size.\"\"\"\n\n return len([r for r in
race.runners if not r.scratched])\n\n def _has_superfecta(self, race: Race) -> bool:\n \"\"\"Check if race offers
Superfecta.\"\"\"\n\n ab = race.available_bets or []\n\n # Support metadata fallback if field not populated\n\n if not ab and
hasattr(race, 'metadata'):\n ab = race.metadata.get('available_bets', [])\n\n return \"Superfecta\" in ab\n\n def
_get_top_runners(self, race: Race, limit: int = 5) -> List[Runner]:\n \"\"\"Get top runners by odds, sorted lowest
first.\"\"\"\n\n # Get active runners with valid odds\n\n with_odds = []\n\n for r in race.runners:\n if r.scratched:\n continue\n
# Refresh odds to avoid stale metadata in continuous monitor mode\n\n wo = _get_best_win_odds(r)\n\n if wo is not None and wo >
1.0:\n # Update runner object with fresh odds for downstream summaries\n\n r.win_odds = float(wo)\n\n # Store the Decimal odds
directly for sorting to avoid conversion\n\n r_with_odds.append((r, wo))\n\n if not r_with_odds:\n return []\n\n # Sort by odds
(lowest first)\n\n sorted_r = sorted(r_with_odds, key=lambda x: x[1])\n\n return [x[0] for x in sorted_r[:limit]]\n\n def
_calculate_mtp(self, start_time: Optional[datetime]) -> int:\n \"\"\"Calculate minutes to post. Returns -9999 if start_time is
None.\"\"\"\n\n if not start_time: return -9999\n\n now = now_eastern()\n\n # Use ensure_eastern to handle naive or other timezones
correctly\n\n st = ensure_eastern(start_time)\n\n delta = st - now\n\n return int(delta.total_seconds() / 60)\n\n def
_get_top_n_runners(self, race: Race, n: int = 5) -> str:\n \"\"\"Get top N runners by win odds.\"\"\"\n\n top_runners =
self._get_top_runners(race, limit=n)\n\n return \"\", \"\".join([str(r.number) if r.number is not None else \"?\" for r in
top_runners])\n\n def _create_race_summary(self, race: Race, adapter_name: str) -> RaceSummary:\n \"\"\"Create a RaceSummary
from a Race object.\"\"\"\n\n top_runners = self._get_top_runners(race, limit=5)\n\n favorite = top_runners[0] if len(top_runners)
>= 1 else None\n\n second_fav = top_runners[1] if len(top_runners) >= 2 else None\n\n gap12 = 0.0\n\n if favorite and second_fav
and favorite.win_odds and second_fav.win_odds:\n\n gap12 = round((second_fav.win_odds - favorite.win_odds) / favorite.win_odds,
2)\n\n return RaceSummary(\n discipline=self._get_discipline_code(race),\n track=normalize_venue_name(race.venue),\n
race_number=race.race_number,\n field_size=self._calculate_field_size(race),\n
superfecta_offered=self._has_superfecta(race),\n adapter=adapter_name,\n start_time=race.start_time,\n
mtp=self._calculate_mtp(race.start_time),\n second_fav_odds=second_fav.win_odds if second_fav else None,\n
second_fav_name=second_fav.name if second_fav else None,\n selection_number=second_fav.number if second_fav else None,\n
favorite_odds=favorite.win_odds if favorite else None,\n favorite_name=favorite.name if favorite else None,\n
top_five_numbers=self._get_top_n_runners(race, 5),\n gap12=gap12,\n is_goldmine=race.metadata.get('is_goldmine', False),\n
is_best_bet=race.metadata.get('is_best_bet', False),\n is_superfecta_key=race.metadata.get('is_superfecta_key', False),\n
superfecta_key_number=race.metadata.get('superfecta_key_number'),\n
superfecta_key_name=race.metadata.get('superfecta_key_name'),\n
superfecta_box_numbers=race.metadata.get('superfecta_box_numbers', [])\n )\n\n\n async def build_race_summaries(self,
races_with_adapters: List[Tuple[Race, str]], window_hours: Optional[int] = 12):\n \"\"\"Build and deduplicate summary list,
with optional time window filtering.\"\"\"\n\n race_map = {}\n\n now = datetime.now(EASTERN)\n\n cutoff = now +

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time_delta(hours=window_hours) if window_hours else None\n\n n adapter_scores = await self.tracker.db.get_adapter_scores(days=30)\n if hasattr(self.tracker, 'db') else {})\n\n for race, adapter_name in races_with_adapters:\n try:\n # Time window filtering\n st = race.start_time\n if not st: continue\n # Guard against None start_time\n if st.tzinfo is None: st =\n st.replace(tzinfo=EASTERN)\n\n # Time window filtering removed to ensure all unique races are counted\n\n summary =\n self._create_race_summary(race, adapter_name)\n\n # Stable key: Canonical Venue + Race Number + Date + Discipline\n canonical_venue = get_canonical_venue(summary.track)\n date_str = summary.start_time.strftime('%m%d')\n if summary.start_time\n else \"Unknown\"\n key = f\"{canonical_venue}|{summary.race_number}|{date_str}|{summary.discipline}\" \n\n if key not in\n race_map:\n race_map[key] = summary\n\n else:\n existing = race_map[key]\n incoming_odds = summary.second_fav_odds or 0.0\n\n existing_odds = existing.second_fav_odds or 0.0\n\n if incoming_odds > existing_odds:\n summary.superfecta_offered =\n summary.superfecta_offered or existing.superfecta_offered\n\n race_map[key] = summary\n\n elif summary.superfecta_offered and not existing.superfecta_offered:\n existing.superfecta_offered =\n True\n\n else:\n if summary.superfecta_offered and not existing.superfecta_offered:\n existing.superfecta_offered = True\n\n except Exception: pass\n\n unique_summaries = list(race_map.values())\n\n self.all_races = sorted(unique_summaries, key=lambda\n x: x.start_time)\n\n # GPT5 Improvement: Keep all races within window for analysis, not just one per track.\n # Window\n broadened to 18 hours (News Mode)\n timing_window_summaries = []\n now = datetime.now(EASTERN)\n\n for summary in\n unique_summaries:\n st = summary.start_time\n if st.tzinfo is None: st = st.replace(tzinfo=EASTERN)\n\n # Calculate Minutes to\n Post\n diff = st - now\n mtp = diff.total_seconds() / 60\n\n # Timing window limited to 8 hours to ensure yield is\n audit-able\n if -45 < mtp <= 480: # 8 hours\n timing_window_summaries.append(summary)\n\n self.golden_zone_races =\n timing_window_summaries\n\n if not self.golden_zone_races:\n self.logger.warning(\"\\ud83d\\udd2d Monitor found 0 races in the\n timing window (-45m to 8h)\", total_unique=len(unique_summaries))\n\n def print_full_list(self):\n \"\"\"Log all fetched\n races.\"\"\"\n lines = [\"\\n\" * 120, \\n \"FULL RACE LIST\", .center(120), \\n \"=\" * 120, \\n f\"{'DISC':<5} {'TRACK':<25}\n {'RH':<4} {'FIELD':<6} {'SUPER':<6} {'ADAPTER':<25} {'START TIME':<20}, \\n \"-\" * 120, \\n ]\n\n for r in sorted(self.all_races,\n key=lambda x: (x.discipline, x.track, x.race_number)):\n superfecta = \"Yes\" if r.superfecta_offered else \"No\"\n\n # Display\n time in Eastern with ET suffix\n st = r.start_time.strftime(\"%m%dT%H:%M ET\")\n if r.start_time else \"Unknown\"\n\n lines.append(f\"[r.discipline:<5] {r.track[:24]:<25} {r.race_number:<4} {r.field_size:<6} {superfecta:<6} {r.adapter[:24]:<25}\n {st:<20})\\n\")\n\n lines.append(\"\\n\" * 120)\n\n lines.append(f\"Total races: {len(self.all_races)}\\n\")\n\n self.logger.info(\"\\n\\n\".join(lines))\n\n def get_bet_now_races(self) -> List[RaceSummary]:\n \"\"\"Get races meeting BET NOW\n criteria (GPT5 Alignment).\"\"\"\n # Configurable thresholds\n ana_config = self.config.get(\"analysis\", {})\n min_odds =\n ana_config.get(\"bet_now_min_odds\", 4.0)\n max_field = ana_config.get(\"max_field_size\", 11)\n min_gap =\n ana_config.get(\"min_gap\", 0.25)\n mtp_limit = ana_config.get(\"bet_now_mtp_limit\", 120)\n\n bet_now = [\\n r for r in\n self.golden_zone_races\n if r.mtp is not None and -10 < r.mtp <= mtp_limit\n and r.second_fav_odds is not None and\n r.second_fav_odds >= min_odds\n and r.field_size <= max_field\n and r.gap12 >= min_gap\n ]\n\n Sort by Superfecta desc, then\n MTP asc\n bet_now.sort(key=lambda r: (not r.superfecta_offered, r.mtp))\n\n return bet_now[:15] # Cap to prevent overwhelming\n output\n\n def get_you_might_like_races(self, bet_now_races: Optional[List[RaceSummary]] = None) -> List[RaceSummary]:\n \"\"\"Get 'You Might Like' races with relaxed criteria (GPT5 Optimized).\"\"\"\n # Configurable thresholds\n ana_config =\n self.config.get(\"analysis\", {})\n min_odds = ana_config.get(\"yml_min_odds\", 3.0)\n max_field =\n ana_config.get(\"max_field_size\", 11)\n min_gap = ana_config.get(\"min_gap\", 0.25)\n mtp_limit =\n ana_config.get(\"yml_mtp_limit\", 240)\n\n if bet_now_races is None:\n bet_now_races = self.get_bet_now_races()\n\n bet_now_keys =\n {(r.track, r.race_number) for r in bet_now_races}\n\n yml = [\\n r for r in self.golden_zone_races\n if r.mtp is not None and\n -10 < r.mtp <= mtp_limit\n and r.second_fav_odds is not None and r.second_fav_odds >= min_odds\n and r.field_size <= max_field\n and r.gap12 >= min_gap\n and (r.track, r.race_number) not in bet_now_keys\n ]\n\n Sort by MTP asc\n yml.sort(key=lambda r: r.mtp)\n\n return yml[:5] # Limit to top 5 recommendations\n\n async def print_bet_now_list(self):\n \"\"\"Log filtered BET NOW list and recent audited goldmine results.\"\"\"\n bet_now = self.get_bet_now_races()\n\n lines = [\\n\n \"=\" * 140, \\n\n \"\\ud83c\\udfaf BET NOW - FAVORITE TO PLACE OPPORTUNITIES\", .center(140), \\n\n \"=\" * 140, \\n\n f\"Updated: {datetime.now(EASTERN).strftime(' %H:%M:%S')} ET\", \\n\n \"Criteria: -10 < MTP <= 120 minutes and 2nd Favorite Odds >= 4.0\", \\n\n\n \"=\" * 140, \\n\n ]\n\n if not bet_now:\n lines.append(\"\\n\\u2f3 No races currently meet BET NOW criteria.\" )\n\n yml =\n self.get_you_might_like_races(bet_now_races=bet_now)\n\n if yml:\n lines.extend([\\n\n \"=\" * 160, \\n\n \"\\ud83c\\udf1f YOU MIGHT LIKE - NEAR-MISS OPPORTUNITIES\", .center(160), \\n\n \"=\" * 160, \\n\n f\"{'SUPER':<6} {'MTP':<5} {'DISC':<5} {'TRACK':<20} {'RH':<4}\n {'FIELD':<6} {'ODDS':<20} {'TOP 5':<20}, \\n\n \"-\" * 160, \\n\n ])\n\n for r in yml:\n sup = \"\\u2705\" if r.superfecta_offered else\n \"\\u274c\"\n fo = f\"{r.favorite_odds:.2f}\" if r.favorite_odds else \"N/A\"\n\n so = f\"{r.second_fav_odds:.2f}\" if\n r.second_fav_odds else \"N/A\"\n\n top5 = r.top_five_numbers or \"N/A\"\n\n Leading zero alignment\n m_str = f\"{r.mtp:02d}\" if 0 <= r.mtp < 10 else str(r.mtp)\n\n lines.append(f\"[sup]<1] [{so}<15] [{top5}]\\n\")\n\n lines.append(\"\\n\" * 160)\n\n self.logger.info(\"\\n\\n\".join(lines))\n\n return\n\n lines.extend([\\n\n f\"{'SUPER':<6} {'MTP':<5} {'DISC':<5} {'TRACK':<20} {'RH':<4} {'FIELD':<6} {'ODDS':<20} {'TOP\n 5':<20}, \\n\n \"-\" * 160, \\n\n ])\n\n for r in bet_now:\n sup = \"\\u2705\" if r.superfecta_offered else \"\\u274c\"\n fo =\n f\"{r.favorite_odds:.2f}\" if r.favorite_odds else \"N/A\"\n\n so = f\"{r.second_fav_odds:.2f}\" if\n r.second_fav_odds else \"N/A\"\n\n top5 = r.top_five_numbers or \"N/A\"\n\n m_str = f\"{r.mtp:02d}\" if 0 <= r.mtp < 10 else str(r.mtp)\n\n lines.append(f\"[sup]<1] [{so}<15] [{top5}]\\n\")\n\n lines.append(f\"[discipline:<5] {r.track[:19]:<20} {r.race_number:<4} {r.field_size:<6} ~ {fo}, {so:<15}\n [{top5}]\\n\")\n\n lines.extend([\\n\n \"=\" * 160, \\n\n f\"Total opportunities: {len(bet_now)}\\n\")\n\n self.logger.info(\"\\n\\n\".join(lines))\n\n # Include recent audited results to provide proof of system performance\n history =\n await self.tracker.db.get_recent_audited_goldmines(limit=10)\n\n if history:\n historical_report =\n generate_historical_goldmine_report(history)\n\n self.logger.info(historical_report)\n\n def save_to_json(self, filename: str =\n \"race_data.json\"):\n \"\"\"Export to JSON.\"\"\"\n bn = self.get_bet_now_races()\n\n yml =\n self.get_you_might_like_races(bet_now_races=bn)\n\n target_file = get_writable_path(filename)\n alert_file =\n get_writable_path(\"monitor_empty.alert\")\n\n if not bn:\n self.logger.warning(\"\\ud83d\\udd2d Monitor found 0 BET NOW\n opportunities\", total_checked=len(self.golden_zone_races))\n\n Structured telemetry for monitoring\n structlog.get_logger(\"FortunaTelemetry\").warning(\"empty_bet_now_list\", golden_zone_count=len(self.golden_zone_races))\n\n Create an indicator file for downstream monitoring (GPT5 Improvement)\n try:\n alert_file.write_text(to_storage_format(datetime.now(EASTERN)))\n\n except Exception: pass\n\n else:\n # Clear alert if it\n exists\n try:\n if alert_file.exists(): alert_file.unlink()\n\n except Exception: pass\n\n data = {\\n\n \"generated_at\":\n to_storage_format(datetime.now(EASTERN)), \\n\n \"target_dates\": self.target_dates, \\n\n \"total_races\": len(self.all_races), \\n\n\n \"bet_now_count\": len(bn), \\n\n \"you_might_like_count\": len(yml), \\n\n \"all_races\": [r.to_dict() for r in self.all_races], \\n\n\n \"bet_now_races\": [r.to_dict() for r in bn], \\n\n \"you_might_like_races\": [r.to_dict() for r in yml], \\n\n }\n\n try:\n # Ensure\n parent directory exists (GPT5 Improvement)\n target_file.parent.mkdir(parents=True, exist_ok=True)\n\n with open(target_file,\n 'w', encoding='utf-8') as f:\n json.dump(data, f, indent=2)\n\n except Exception as e:\n self.logger.error(\"failed_saving_race_data\", path=str(target_file), error=str(e))\n\n # Persistent history log\n self._append_to_history(bn + yml)\n\n def _append_to_history(self, races: List[RaceSummary]):\n \"\"\"Append races to\n persistent history for future result matching.\"\"\"\n\n if not races:\n return\n\n history_file =\n get_writable_path(\"prediction_history.jsonl\")\n\n # Improvement 04: Rotation logic\n try:\n if history_file.exists() and\n history_file.stat().st_size > 10 * 1024 * 1024: # 10MB\n backup = history_file.with_suffix(\".jsonl.1\")\n\n history_file.replace(backup)\n\n self.logger.info(\"Rotated prediction history file\")\n\n except Exception: pass\n\n timestamp =\n to_storage_format(datetime.now(EASTERN))\n\n try:\n with open(history_file, 'a', encoding='utf-8') as f:\n for r in races:\n record = r.to_dict()\n\n record[\"logged_at\"] = timestamp\n\n f.write(json.dumps(record) + \"\\n\\n\")\n\n except Exception as e:\n
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self.logger.error("\nHistory logging failed", error=str(e))\n\n async def run_once(self, loaded_races: Optional[List[Race]] = None, adapter_names: Optional[List[str]] = None):\n try:\n if loaded_races is not None:\n self.logger.info("\nUsing loaded races", count=len(loaded_races))\n # Map to (Race, AdapterName) tuple expected by build_race_summaries\n raw = [(r, r.source) for r in loaded_races]\n else:\n await self.initialize_adapters(adapter_names=adapter_names)\n raw = await self.fetch_all_races()\n\n await self.build_race_summaries(raw, window_hours=12) # Use 12h window for monitor\n\n self.print_full_list()\n await self.print_bet_now_list()\n\n for r in self.all_races:\n r.mtp = self._calculate_mtp(r.start_time)\n\n self.save_to_json()\n finally:\n for a in self.adapters: await a.shutdown()\n\n await GlobalResourceManager.cleanup()\n\n\n async def run_continuous(self):\n await self.initialize_adapters()\n raw = await self.fetch_all_races()\n\n await self.build_race_summaries(raw, window_hours=12)\n\n self.print_full_list()\n\n try:\n for _ in range(1000): # Iteration limit to prevent potential hangs\n for r in self.all_races: r.mtp = self._calculate_mtp(r.start_time)\n\n await self.print_bet_now_list()\n\n self.save_to_json()\n\n await asyncio.sleep(self.refresh_interval)\n except KeyboardInterrupt:\n self.logger.info("\nStopped by user")\n\n except asyncio.CancelledError:\n self.logger.info("\nMonitor task cancelled")\n finally:\n for a in self.adapters: await a.shutdown()\n\n await GlobalResourceManager.cleanup()\n\n",\n "name": "FavoriteToPlaceMonitor"\n },\n {\n "type": "miscellaneous",\n "content": "\n\n\n\n\n# ----- \n\n python_service/adapters/oddschecker_adapter.py\n\n\n\n\n\n",\n },\n {\n "type": "class",\n "content": "class OddscheckerAdapter(BrowserHeadersMixin, DebugMixin, BaseAdapterV3):\n\n \"\"\"\n Adapter for scraping horse racing odds from Oddschecker, migrated to BaseAdapterV3.\n\n SOURCE_NAME = \"Oddschecker\"\n BASE_URL = \"https://www.oddschecker.com\"\n\n def __init__(self, config=None):\n super().__init__(source_name=self.SOURCE_NAME, base_url=self.BASE_URL, config=config)\n\n def _configure_fetch_strategy(self) -> FetchStrategy:\n # Oddschecker is heavily protected by Cloudflare/Playwright with high timeout and network idle\n return FetchStrategy(\n primary_engine=BrowserEngine.PLAYWRIGHT,\n enable_js=True,\n stealth_mode=\"camouflage\",\n timeout=120,\n network_idle=True\n )\n\n async def make_request(self, method: str, url: str, **kwargs: Any) -> Any:\n # Playwright doesn't use impersonate but SmartFetcher handles it now\n\n return await super().make_request(method, url, **kwargs)\n\n def _get_headers(self) -> dict:\n return self._get_browser_headers(host=\"www.oddschecker.com\")\n\n\n async def _fetch_data(self, date: str) -> Optional[dict]:\n \"\"\"\n Fetches the raw HTML for all race pages for a given date. This involves a multi-level fetch.\n\n sem = asyncio.Semaphore(3)\n dt = parse_date_string(date)\n date_iso = dt.strftime(\"%Y-%m-%d\")\n index_url = f\"/horse-racing/{date_iso}\"\n\n index_response = await self.make_request(\"GET\", index_url, headers=self._get_headers())\n\n if not index_response or not index_response.text:\n self.logger.warning(\"Failed to fetch Oddschecker index page\", url=index_url)\n\n return None\n\n self._save_debug_html(index_response.text, f\"oddschecker_index_{date}\")\n\n parser = HTMLParser(index_response.text)\n\n # Find all links to individual race pages\n metadata = {}\n\n try:\n target_date = parse_date_string(date).date()\n\n except Exception:\n target_date = datetime.now(EASTERN).date()\n\n site_tz = ZoneInfo(\"Europe/London\")\n\n now_site = datetime.now(site_tz)\n\n # Group by track to pick \"next\" race\n track_map = defaultdict(list)\n\n # Broaden selectors for race links\n for selector in [\"a.race-time-link[href]\", \"a[href*= '/horse-racing/' ][href*= '/20' ]\", \"a.rf_link\"]:\n for a in parser.css(selector):\n href = a.attributes.get(\"href\")\n\n if href and not href.endswith(\"/horse-racing/\"):\n # Ensure absolute URL\n full_url = href if href.startswith(\"http\") else f\"{self.BASE_URL}{href}\" \n\n # Extract track from URL if possible, or use parent's URL usually /horse-racing/venue/date/time\n parts = full_url.split(\"/\")\n\n if len(parts) >= 6:\n track = parts[4]\n txt = node_text(a)\n\n # Time is often in text\n track_map[track].append({\"url\": full_url, \"time_txt\": txt})\n\n for track, races in track_map.items():\n for r in races:\n if re.match(r\"\\d{1,2}:\\d{2}\", r[\"time_txt\"]):\n try:\n rt = datetime.strptime(r[\"time_txt\"], \"%H:%M\").replace(year=target_date.year, month=target_date.month, day=target_date.day, tzinfo=site_tz)\n\n # Broaden window to capture multiple races\n diff = (rt - now_site).total_seconds() / 60\n\n if not (-45 < diff <= 1080):\n continue\n\n metadata.append({\"url\": r[\"url\"]})\n\n except Exception: pass\n\n if not metadata:\n self.logger.warning(\"No metadata found\", context=\"Oddschecker Index Parsing\", url=index_url)\n\n self.metrics.record_parse_warning()\n\n return None\n\n\n async def fetch_single_html(url_path: str):\n async with sem:\n # Small delay to avoid ban\n await asyncio.sleep(0.5 + random.random() * 0.5)\n\n response = await self.make_request(\"GET\", url_path, headers=self._get_headers())\n\n return response.text if response else \"\"\n\n tasks = [fetch_single_html(link) for link in metadata]\n\n html_pages = await asyncio.gather(*tasks)\n\n return {\"pages\": html_pages, \"date\": date}\n\n def _parse_races(self, raw_data: Any) -> List[Race]:\n \"\"\"\n Parses a list of raw HTML strings from different races into Race objects.\n\n \"\"\"\n\n if not raw_data or not raw_data.get(\"pages\"):\n return []\n\n try:\n race_date = parse_date_string(raw_data[\"date\"])\n\n date = race_date.date()\n\n except ValueError:\n self.logger.error(\"Invalid date format provided to OddscheckerAdapter\", date=raw_data.get(\"date\"))\n\n return []\n\n all_races = []\n\n for html in raw_data[\"pages\"]:\n if not html:\n continue\n\n try:\n parser = HTMLParser(html)\n\n race = self._parse_race_page(parser, race_date)\n\n if race:\n all_races.append(race)\n\n except (AttributeError, IndexError, ValueError):\n self.logger.warning(\"Error parsing a race from Oddschecker, skipping race\", exc_info=True)\n\n continue\n\n return all_races\n\n def _parse_race_page(self, parser: HTMLParser, race_date) -> Optional[Race]:\n track_name_node = parser.css_first(\"hl.meeting-name\")\n\n if not track_name_node:\n return None\n\n track_name = node_text(track_name_node)\n\n race_time_node = parser.css_first(\"span.race-time\")\n\n if not race_time_node:\n return None\n\n race_time_str = node_text(race_time_node)\n\n # Heuristic to find race number from navigation\n active_link = parser.css_first(\"a.race-time-link.active\")\n\n race_number = 0\n\n if active_link:\n all_links = parser.css(\"a.race-time-link\")\n\n try:\n for i, link in enumerate(all_links):\n if link.html == active_link.html:\n race_number = i + 1\n break\n\n except Exception:\n pass\n\n start_time = datetime.combine(race_date, datetime.strptime(race_time_str, \"%H:%M\").time())\n\n runners = [runner for row in parser.css(\"tr.race-card-row\") if (runner := self._parse_runner_row(row))]\n\n if not runners:\n return None\n\n # BUG-6 Fix: Use canonical venue for race ID\n venue_key = get_canonical_venue(track_name).lower().replace(' ', '')\n\n return Race(id=f\"oc_{venue_key}_{start_time.strftime('%Y%m%d')}_r{race_number}\", venue=track_name, race_number=race_number, start_time=start_time, runners=runners, source=self.source_name)\n\n\n def _parse_runner_row(self, row: Node) -> Optional[Runner]:\n try:\n name_node = row.css_first(\"span.selection-name\")\n\n if not name_node:\n return None\n\n name = node_text(name_node)\n\n odds_node = row.css_first(\"span.bet-button-odds-desktop, span.best-price\")\n\n if not odds_node:\n return None\n\n odds_str = node_text(odds_node)\n\n number_node = row.css_first(\"td.runner-number\")\n\n number = 0\n\n if number_node:\n num_txt = \"\".join(filter(str.isdigit, node_text(number_node)))\n\n if num_txt:\n number = int(num_txt)\n\n if not name or not odds_str:\n return None\n\n win_odds = parse_odds_to_decimal(odds_str)\n\n # Advanced heuristic fallback\n if win_odds is None:\n win_odds = SmartOddsExtractor.extract_from_node(row)\n\n odds_dict = {} \n\n if odds_data := create_odds_data(self.source_name, win_odds):\n odds_dict[self.source_name] = odds_data\n\n return Runner(number=number, name=name, odds=odds_dict)\n\n except (AttributeError, ValueError):\n self.logger.warning(\"Failed to parse a runner on Oddschecker, skipping runner.\")\n\n return None\n\n",\n "name": "OddscheckerAdapter"\n },\n }
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"type": "miscellaneous",
"content": "\n# python_service/adapters/timeform_adapter.py\n\n\n\n\n\n",
},
{
"type": "class",
"content": "class TimeformAdapter(JSONParsingMixin, BrowserHeadersMixin, DebugMixin, BaseAdapterV3):\n\n    \"\"\"Adapter for\n    timeform.com, migrated to BaseAdapterV3 and standardized on selectolax.\n    \"\"\"\n\n    SOURCE_NAME = \"Timeform\"\n    BASE_URL =\n    \"https://www.timeform.com\"\n\n    def __init__(self, config=None):\n        super().__init__(source_name=self.SOURCE_NAME,\n        base_url=self.BASE_URL, config=config)\n\n    def _configure_fetch_strategy(self) -> FetchStrategy:\n        \"\"\"Timeform often blocks\n        basic requests; Playwright is robust\n        \"\"\"\n        return FetchStrategy(\n            primary_engine=BrowserEngine.PLAYWRIGHT,\n            enable_js=True,\n            stealth_mode=\"camouflage\",\n            timeout=90,\n            network_idle=True\n        )\n\n    def _get_headers(self) -> dict:\n        headers =\n        self._get_browser_headers(host=\"www.timeform.com\")\n        headers.update({\n            \"Accept\":\n            \"text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8\",\n            \"Accept-Language\":\n            \"en-US,en;q=0.9\",\n        })\n        return headers\n\n    async def _fetch_data(self, date: str) -> Optional[dict]:\n        \"\"\"Fetches the\n        raw HTML for all race pages for a given date.\n        \"\"\"\n        sem = asyncio.Semaphore(5)\n        dt = parse_date_string(date)\n        date_iso =\n        dt.strftime(\"%Y-%m-%d\")\n        index_url = f\"/horse-racing/racecards/{date_iso}\"\n        index_response = await\n        self.make_request(\"GET\", index_url, headers=self._get_headers())\n        if not index_response or not index_response.text:\n            self.logger.warning(\"Failed to fetch Timeform index page\", url=index_url)\n            return None\n\n        self._save_debug_snapshot(index_response.text, f\"timeform_index_{date}\")\n        parser = HTMLParser(index_response.text)\n        # Updated selector for race links\n        try:\n            target_date = parse_date_string(date).date()\n        except Exception:\n            target_date =\n            datetime.now(EASTERN).date()\n        site_tz = ZoneInfo(\"Europe/London\")\n        now_site = datetime.now(site_tz)\n        track_map =\n        defaultdict(list)\n        # Broaden selectors for Timeform race links\n        for selector in [\"a[href*=\\\"/racecards/\\\"]\", \"a.rf__link\\\", \"a.rf-meeting-race__time\\\", \"a.rp-meetingItem_race__time\"]:\n            for a in parser.css(selector):\n                href =\n                a.attributes.get(\"href\")\n                if href and \"/racecards/\" in href and not href.endswith(\"/racecards\"):\n                    # URL usually:\n                    # /horse-racing/racecards/venue/date/time/... \n                    # or: /racecards/venue/date/time/ \n                    parts = href.split(\"/\")\n                    # Handle both\n                    # relative and absolute-ish paths\n                    track = \"unknown\"\n                    for i, p in enumerate(parts):\n                        if p == \"racecards\" and i + 1 < len(parts):\n                            track = parts[i+1]\n                            break\n                    txt = node_text(a)\n                    track_map[track].append({\n                        \"url\": href,\n                        \"time_txt\":\n                        txt\n                    })\n                    links = []\n                    for track, races in track_map.items():\n                        for r in races:\n                            # Timeform often uses HH:MM in text\n                            time_match = re.search(r\"(\\d{1,2}:\\d{2})\", r[\"time_txt\"])\n                            if time_match:\n                                rt =\n                                datetime.strptime(time_match.group(1), \"%H:%M\").replace(\n                                    year=target_date.year,\n                                    month=target_date.month,\n                                    day=target_date.day,\n                                    tzinfo=site_tz\n                                )\n                                # Broaden window to capture multiple races\n                                diff = (rt - now_site).total_seconds()\n                                / 60\n                                if not (-45 < diff <= 1080):\n                                    continue\n                                full_url = r[\"url\"] if r[\"url\"].startswith(\"http\") else\n                                f\"{self.BASE_URL}{r['url']}\"\n                                links.append(full_url)\n                            except Exception:\n                                pass\n                    if not links:\n                        self.logger.warning(\"No\n                        metadata found\", context=\"Timeform Index Parsing\", url=index_url)\n                        self.metrics.record_parse_warning()\n                        return None\n\n                    async def fetch_single_html(url_path: str):\n                        async with sem:\n                            await asyncio.sleep(0.5)\n                            response = await\n                            self.make_request(\"GET\", url_path, headers=self._get_headers())\n                            return (url_path, response.text) if response else\n                            (url_path, \"\")\n\n                    self.logger.info(f\"Found {len(links)} race links on Timeform\")\n                    tasks = [fetch_single_html(link) for\n                    link in links]\n                    results = await asyncio.gather(*tasks)\n                    return {\"pages\": [r for r in results if r[1]], \"date\": date}\n\n        def _parse_races(self, raw_data: Any) -> List[Race]:\n            \"\"\"Parses a list of raw HTML strings into Race objects.\n            \"\"\"\n            if not raw_data or not raw_data.get(\"pages\"):\n                return []\n            try:\n                race_date = parse_date_string(raw_data[\"date\"]).date()\n            except ValueError:\n                self.logger.error(\"Invalid date format\", date=raw_data.get(\"date\"))\n            all_races = []\n            for url_path, html_content in raw_data[\"pages\"]:\n                if not html_content:\n                    continue\n                try:\n                    parser =\n                    HTMLParser(html_content)\n                    # Extract via JSON-LD if possible\n                    venue = \"\"\n                    start_time = None\n                    is_handicap = None\n                    scripts = self._parse_all_javascript_from_scripts(parser, \"script[type=\\\"application/ld+json\\\"]\", context=\"Betfair Index\")\n                    for data in scripts:\n                        if data.get(\"@type\") == \"Event\":\n                            venue = normalize_venue_name(data.get(\"location\"),\n                            {}).get(\"name\", \"\")\n                            if sd := data.get(\"startDate\"):\n                                # 2026-01-28T14:32:00\n                                start_time =\n                                from_storage_format(sd.split(\"T\")[0])\n                                break\n                    title_node = parser.css_first(\"title\")\n                    if title_node:\n                        title_text =\n                        node_text(title_node)\n                        if \"HANDICAP\" in title_text.upper():\n                            is_handicap = True\n                    # BUG-17: Prefer URL-based time\n                    # extraction to avoid shared card-start-time issues\n                    url_time = None\n                    time_match = re.search(r\"(\\d{4})/?$\", url_path.split(\"?\")[0])\n                    if time_match:\n                        url_time =\n                        datetime.combine(\n                            race_date,\n                            datetime.strptime(time_match.group(1), \"%H%M\").time()\n                        )\n                    except Exception:\n                        pass\n                    if url_time:\n                        start_time =\n                        url_time\n                    if not venue:\n                        # Fallback to title\n                        if title_node:\n                            title_text =\n                            re.search(r\"(\\d{1,2}:\\d{2})\\s+([^\"]+)\", title_text)\n                            if match:\n                                time_str = match.group(1)\n                                venue =\n                                normalize_venue_name(match.group(2).strip())\n                            if not start_time:\n                                start_time =\n                                datetime.combine(race_date,\n                                    datetime.strptime(time_str, \"%H:%M\").time())\n                    if not venue or not start_time:\n                        continue\n                    # Betting Forecast Parsing\n                    forecast_map = {}\n                    verdict_section = parser.css_first(\"section.rp-verdict\")\n                    if verdict_section:\n                        forecast_text =\n                        clean_text(node_text(verdict_section))\n                        if \"Betting Forecast :\" in forecast_text:\n                            # \"Betting Forecast : 15/8 2.87 Spring\n                            # Is Here, 3/1 4 This Guy, ...\"\n                            after_forecast = forecast_text.split(\"Betting Forecast :\")[1]\n                            # Split by comma\n                            parts =\n                            after_forecast.split(',')\n                            for part in parts:\n                                # Match odds and then name\n                                # Odds can be fractional space decimal\n                                m =\n                                re.search(r\"(\\d+\\/\\d+|EVENS)\\s+([^\"]+)\", part.strip())\n                                if m:\n                                    odds_str = m.group(1)\n                                    name =\n                                    clean_text(m.group(3))\n                                    forecast_map[name.lower()] = odds_str\n                    # Runners\n                    runners = []\n                    # Use tbody as the main\n                    # container for each runner\n                    for row in parser.css(\"tbody.rp-horse-row\"):\n                        if runner := self._parse_runner(row,\n                        forecast_map):\n                            runners.append(runner)\n                    if not runners:\n                        continue\n                    # Race number from URL or sequence\n                    race_number =\n                    0\n                    num_match = re.search(r\"(\\d+)/(\\d+|/)?\", url_path)\n                    if num_match:\n                        # .../1432/207/1/view... -> the '1' is the race number\n                        url_parts =\n                        url_path.split('/')\n                        if len(url_parts) >= 10:\n                            try:\n                                race_number = int(url_parts[9])\n                            except Exception:\n                                pass\n                    else:\n                        race =\n                        Race(id=f\"tf_{venue.lower().replace(' ', '')}_{start_time:%Y%m%d}_R{race_number}\",\n                            venue=venue,\n                            race_number=race_number,\n                            start_time=start_time,\n                            runners=runners,\n                            is_handicap=is_handicap,\n                            source=self.source_name\n                        )\n                    all_races.append(race)\n                except Exception as e:\n                    self.logger.warning(f\"Error parsing Timeform race: {e}\")\n                continue\n            return all_races\n\n        def _parse_runner(self, row: Node, forecast_map: dict = None) -> Optional[Runner]:\n            \"\"\"Parses a\n            single runner from a table row node.\n            \"\"\"\n            try:\n                name_node = row.css_first(\"a.rp-horse\")\n                or\n                row.css_first(\"a.rp-horseTable-horse-name\")\n            except Exception:\n                name = clean_text(node_text(name_node))\n            num =\n            0\n            num_attr = row.attributes.get(\"data-entry-number\")\n            if num_attr:\n                val = int(num_attr)\n                if val <= 40:\n                    number = val\n            except Exception:\n                pass\n            if not number:\n                num_node = row.css_first(\".rp-entry-number\")\n                or\n                row.css_first(\"span.rp-horseTable-horse-number\")\n            if num_node:\n                num_text = clean_text(node_text(num_node)).strip(\"()\")\n                num_match = re.search(r\"(\\d+)\", num_text)\n                if num_match:\n                    val = int(num_match.group())\n                    if val <= 40:\n                        number = val\n            win_odds = None\n            odds_source = None\n            if forecast_map:\n                win_odds = parse_odds_to_decimal(forecast_map.get(name.lower()))\n            if win_odds is not None:\n                odds_source = \"morning_line\"\n            # Try to find live odds button if available (old selector)\n            if\n            not win_odds:\n                odds_tag = row.css_first(\"button.rp-bet-placer-btn_odds\")\n                if odds_tag:\n                    win_odds =\n                    parse_odds_to_decimal(clean_text(node_text(odds_tag)))\n                if win_odds is not None:\n                    odds_source = \"extracted\"\n            # Advanced\n            # heuristic fallback\n            if win_odds is None:\n                win_odds = SmartOddsExtractor.extract_from_node(row)\n            if win_odds is not None:\n                odds_source = \"smart_extractor\"\n            odds_data = {}\n            if odds_val := create_odds_data(self.source_name, win_odds):\n                odds_data[self.source_name] = odds_val\n            return Runner(number=number,\n            name=name,\n            win_odds=win_odds,\n            odds=odds_data,\n            odds_source=odds_source)\n        except (AttributeError, ValueError, TypeError):\n            return None\n\n    \"name\": \"TimeformAdapter\"
},

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"type": "miscellaneous",
"content": "\n# python_service/adapters/racingpost_adapter.py\n\n\n",
},
{
"type": "class",
"content": "class RacingPostAdapter(BrowserHeadersMixin, DebugMixin, BaseAdapterV3):\n    \"\"\"\n    Adapter for scraping Racing Post racecards, migrated to BaseAdapterV3.\n    SOURCE_NAME = \"RacingPost\"\n    BASE_URL = \"https://www.racingpost.com\"\n    def __init__(self, config=None):\n        super().__init__(source_name=self.SOURCE_NAME,\n        base_url=self.BASE_URL, config=config)\n        self.headers.update({\"Accept\":\n        \"text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.0\",\n        \"Accept-Language\": \"en-US,en;q=0.9\", \"User-Agent\": \"Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/91.0.4472.164 Safari/537.36\"\n        })\n        self._configure_fetch_strategy(self) -> FetchStrategy\n    # Optimized for speed: CURL_CFFI is much faster than Playwright for large batches of racecards.\n    return FetchStrategy(\n    primary_engine=BrowserEngine.CURL_CFFI,\n    enable_js=False,\n    stealth_mode=\"camouflage\",\n    timeout=60,\n    block_resources=True)\n    def _get_headers(self) -> dict:\n        headers = self._get_browser_headers(host=\"www.racingpost.com\")\n        headers.update({\"Accept\":\n        \"text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8\", \"Accept-Language\": \"en-US,en;q=0.5\", \"Accept-Encoding\": \"gzip, deflate, br\", \"User-Agent\": \"Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/91.0.4472.164 Safari/537.36\"\n        })\n        return headers\n    async def _fetch_data(self, date: str) -> Any:\n        url = f\"https://www.racingpost.com/international/{date}/index.html\"\n        dt = parse_date_string(date)\n        date_iso = dt.strftime(\"%Y-%m-%d\")\n        index_url = f\"https://www.racingpost.com/international/{date_iso}/index.html\"\n        # RacingPost international URL sometimes varies\n        intl_urls = [f\"https://www.racingpost.com/international/{date_iso}/international/{date_iso}/index.html\", f\"https://www.racingpost.com/international/{date_iso}/index.html\"]\n        index_response = await self.make_request(\"GET\", index_url, headers=self._get_headers())\n        intl_response = None\n        for url in intl_urls:\n            resp = await self.make_request(\"GET\", url, headers=self._get_headers())\n            if resp and resp.status == 200:\n                intl_response = resp\n                break\n        race_card_urls = []\n        try:\n            target_date = parse_date_string(date).date()\n        except Exception:\n            target_date = datetime.now(EASTERN).date()\n        site_tz = ZoneInfo(\"Europe/London\")\n        now_site = datetime.now(site_tz)\n        if index_response and index_response.text:\n            self._save_debug_html(index_response.text, f\"racingpost_index_{date}.html\")\n            index_parser = HTMLParser(index_response.text)\n            # Broaden window to capture multiple races\n            meetings = index_parser.css('.rp-raceCourse__panel') or index_parser.css('.RC-meetingItem') or index_parser.css('.rp-meetingItem') or index_parser.css('.RC-courseCards')\n            for meeting in meetings:\n                # Broaden a tag selectors to catch new Racing Post structures\n                for link in meeting.css('a[data-test-selector^=\"RC-meetingItem_link_race\"]', a rp-raceCourse_panel_race_time, a rp-meetingItem_race_time, a RC-meetingItem_race_time, a RC-meetingItem_link, a[href*=\"/racecards/\"]):\n                    href = link.attributes.get(\"href\")\n                    if not href or \"/results/\" in href:\n                        continue\n                    txt = clean_text(node_text(link))\n                    time_match = re.search(r\"(\\d{1,2}:\\d{2})\", txt)\n                    if time_match:\n                        time_str = time_match.group(1)\n                        tm = datetime.strptime(time_str, \"%H:%M\")\n                        if tm.hour < 9:\n                            tm = tm.replace(hour=tm.hour + 12)\n                        rt = tm.replace(year=target_date.year, month=target_date.month, day=target_date.day, tzinfo=site_tz)\n                        diff = (rt - now_site).total_seconds() / 60\n                        if not (-45 < diff <= 1080):\n                            continue\n                        except Exception:\n                            pass\n                    race_card_urls.append(href)\n            elif intl_response:\n                self.logger.warning(\"Unexpected status\")\n                status=intl_response.status, url=intl_response.url\n                if intl_response and intl_response.text:\n                    self._save_debug_html(intl_response.text, f\"racingpost_intl_index_{date}.html\")\n                    intl_parser = HTMLParser(intl_response.text)\n                    meetings = intl_parser.css('.rp-raceCourse__panel') or intl_parser.css('.RC-meetingItem') or intl_parser.css('.rp-meetingItem') or intl_parser.css('.RC-courseCards')\n                    for meeting in meetings:\n                        for link in meeting.css('a[data-test-selector^=\"RC-meetingItem_link_race\"]', a rp-raceCourse_panel_race_time, a rp-meetingItem_race_time, a RC-meetingItem_race_time, a RC-meetingItem_link, a[href*=\"/racecards/\"]):\n                            href = link.attributes.get(\"href\")\n                            if not href or \"/results/\" in href:\n                                continue\n                                txt = clean_text(node_text(link))\n                                time_match = re.search(r\"(\\d{1,2}:\\d{2})\", txt)\n                                if time_match:\n                                    time_str = time_match.group(1)\n                                    tm = datetime.strptime(time_str, \"%H:%M\")\n                                    if tm.hour < 9:\n                                        tm = tm.replace(hour=tm.hour + 12)\n                                    rt = tm.replace(year=target_date.year, month=target_date.month, day=target_date.day, tzinfo=site_tz)\n                                    diff = (rt - now_site).total_seconds() / 60\n                                    if not (-45 < diff <= 1080):\n                                        continue\n                                        except Exception:\n                                            pass\n                            race_card_urls.append(href)\n            elif intl_response:\n                self.logger.warning(\"Unexpected status\")\n                status=intl_response.status, url=intl_response.url\n                if intl_response and intl_response.text:\n                    self._save_debug_html(intl_response.text, f\"racingpost_intl_index_{date}.html\")\n                    intl_parser = HTMLParser(intl_response.text)\n                    meetings = intl_parser.css('.rp-raceCourse__panel') or intl_parser.css('.RC-meetingItem') or intl_parser.css('.rp-meetingItem') or intl_parser.css('.RC-courseCards')\n                    for meeting in meetings:\n                        for link in meeting.css('a[data-test-selector^=\"RC-meetingItem_link_race\"]', a rp-raceCourse_panel_race_time, a rp-meetingItem_race_time, a RC-meetingItem_race_time, a RC-meetingItem_link, a[href*=\"/racecards/\"]):\n                            href = link.attributes.get(\"href\")\n                            if not href or \"/results/\" in href:\n                                continue\n                                txt = clean_text(node_text(link))\n                                time_match = re.search(r\"(\\d{1,2}:\\d{2})\", txt)\n                                if time_match:\n                                    time_str = time_match.group(1)\n                                    tm = datetime.strptime(time_str, \"%H:%M\")\n                                    if tm.hour < 9:\n                                        tm = tm.replace(hour=tm.hour + 12)\n                                    rt = tm.replace(year=target_date.year, month=target_date.month, day=target_date.day, tzinfo=site_tz)\n                                    diff = (rt - now_site).total_seconds() / 60\n                                    if not (-45 < diff <= 1080):\n                                        continue\n                                        except Exception:\n                                            pass\n                            race_card_urls.append(href)\n            else:\n                self.logger.warning(\"Failed to fetch RacingPost racecard links\")\n                date=date\n                for resp in [index_response, intl_response]:\n                    if resp and resp.text:\n                        p = HTMLParser(resp.text)\n                        # Even more aggressive: any link containing /racecards/ and a date-like pattern\n                        hrefs = p.css('a[href*=\"/racecards/\"]')\n                        href = a.attributes.get(\"href\")\n                        if href and re.search(r\"/(\\d{4}-\\d{2}-\\d{2})/\", href) or re.search(r\"/(\\d+\\.\\d+/)?$\", href):\n                            href = href\n                            race_card_urls.append(href)\n                            if not race_card_urls:\n                                self.logger.warning(\"Failed to fetch RacingPost racecard links\")\n                                date=date\n                                self.metrics.record_parse_warning()\n                                return None\n                                Deduplicate URLs to avoid redundant fetching\n                                race_card_urls = list(dict.fromkeys(race_card_urls))\n                                self.logger.info(f\"Deduplicated {len(race_card_urls)} RacingPost links\")\n                                original=len(race_card_urls), unique=len(set(race_card_urls))\n                                async def fetch_single_html(url: str):\n                                    response = await self.make_request(\"GET\", url, headers=self._get_headers())\n                                    return response.text if response else \"\"\n                                tasks = [fetch_single_html(url) for url in race_card_urls]\n                                html_contents = await asyncio.gather(*tasks)\n                                return {\"date\": date, \"html_contents\": html_contents}\n                            def _parse_races(self, raw_data: Any) -> List[Race]:\n                                Parses a list of raw HTML strings into Race objects.\n                                if not raw_data or not raw_data.get(\"html_contents\"):\n                                    return []\n                                date = raw_data[\"date\"]\n                                html_contents = raw_data[\"html_contents\"]\n                                all_races: List[Race] = []\n                                for html in html_contents:\n                                    if not html:\n                                        continue\n                                    parser = HTMLParser(html)\n                                    venue_node = (\n                                    parser.css_first('[data-test-selector=\"RC-courseHeader_name\"]')\n                                    or parser.css_first('a[data-test-selector=\"RC-courseHeader_name\"]')\n                                    or parser.css_first('a[data-test-selector=\"RC-course_name\"]')\n                                    )\n                                    if not venue_node:\n                                        continue\n                                    venue_raw = node_text(venue_node)\n                                    venue = normalizeVenueName(venue_raw)\n                                    race_time_node = (\n                                    parser.css_first('[data-test-selector=\"RC-courseHeader_time\"]')\n                                    or parser.css_first('span[data-test-selector=\"RC-courseHeader_time\"]')\n                                    or parser.css_first('span[data-test-selector=\"RC-course_time\"]')\n                                    )\n                                    if not race_time_node:\n                                        continue\n                                    race_time_str = node_text(race_time_node)\n                                    S5_2014_extract_race_type = independent_review_item\n                                    race_type = None\n                                    header_text = node_text(parser.css_first('.rp-raceCourse__panel_race_info') or parser.css_first('.RC-course__info'))\n                                    or parser.css_first('.RC-courseHeader')\n                                    rt_match = re.search(r'(Maiden|S|w|Claiming|Allowance|Graded|Stakes|Stakes)', header_text, re.I)\n                                    if rt_match:\n                                        race_type = rt_match.group(1)\n                                    is_handicap = None\n                                    if \"HANDICAP\" in header_text.upper():\n                                        is_handicap = True\n                                    race_datetime_str = f\"{date} {race_time_str}\"\n                                    try:\n                                        start_time = datetime.strptime(race_datetime_str, f\"{%DATE_FORMAT}%H:%M\")\n                                    except ValueError:\n                                        Handle cases where time might have extra text or different format\n                                        ntime_match = re.search(r\"(\\d{1,2}:\\d{2})\", race_time_str)\n                                        if time_match:\n                                            start_time = datetime.strptime(f\"{date}{time_match.group(1)}\", f\"{%DATE_FORMAT}%H:%M\")\n                                        else:\n                                            continue\n                                    runners = self.parse_runners(parser)\n                                    if venue and runners:\n                                        race_number = self.get_race_number(parser, start_time)\n                                        race = Race(id=f\"rp_{venue.lower().replace(' ', '')}_{date}_{race_number}\", venue=venue, name=race_number+\"-\"+race_number, start_time=start_time, runners=runners, race_type=race_type, is_handicap=is_handicap, source=self.source_name)\n                                        all_races.append(race)\n                                    except (AttributeError, ValueError):\n                                        self.logger.error(f\"Failed to parse RacingPost race from HTML content.\", exc_info=True)\n                                continue\n                                return all_races\n                                def get_race_number(self, parser: HTMLParser, start_time: datetime) -> int:\n                                    Derives
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the race number by finding the active time in the nav bar.\n\n time_str_to_find = start_time.strftime("%H:%M")\n
time_links = parser.css('a[data-test-selector="RC-raceTime"]')\n for i, link in enumerate(time_links):\n if node_text(link)
== time_str_to_find:\n return i + 1\n return 1\n\n def _parse_runners(self, parser: HTMLParser) -> list[Runner]:\n
\n\n\n Parses all runners from a single race card page.\n\n\n runners = []\n runner_nodes = (\n
parser.css('div[data-test-selector="RC-runnerCard"]')\n or parser.css('.RC-runnerRow')\n )\n\n # Betting Forecast Fallback\n
forecast_map = {}\n for group in parser.css('*[data-test-selector="RC-bettingForecast_group"]'):\n group_text =
node_text(group)\n # Format: '2/1 Horse Name' or similar\n link =
group.css_first('*[data-test-selector="RC-bettingForecast_link"]')\n if link:\n horse_name = clean_text(node_text(link))\n #
Remove horse name from group_text to get odds\n odds_part = group_text.replace(horse_name, '').strip().rstrip(',')\n if
val := parse_odds_to_decimal(odds_part):\n forecast_map[horse_name.lower()] = val\n\n for node in runner_nodes:\n if runner :=
self._parse_runner(node, forecast_map):\n runners.append(runner)\n return runners\n\n def _parse_runner(self, node: Node,
forecast_map: Optional[Dict[str, float]] = None) -> Optional[Runner]:\n try:\n number_node = (\n
node.css_first('span[data-test-selector="RC-cardPage-runnerNumber-no"]')\n or
node.css_first('span[data-test-selector="RC-runnerNumber"]')\n or node.css_first('.RC-runnerNumber__no')\n )\n name_node =
(\n node.css_first('a[data-test-selector="RC-cardPage-runnerName"]')\n or
node.css_first('a[data-test-selector="RC-runnerName"]')\n or node.css_first('.RC-runnerName')\n )\n odds_node = (\n
node.css_first('span[data-test-selector="RC-cardPage-runnerPrice"]')\n or
node.css_first('a[data-test-selector="RC-cardPage-runnerPrice"]')\n or
node.css_first('span[data-test-selector="RC-runnerPrice"]')\n or node.css_first('.RC-runnerPrice')\n )\n\n if not
name_node:\n return None\n\n name = clean_text(node_text(name_node))\n\n number = 0\n if number_node:\n number_str =
clean_text(node_text(number_node))\n if number_str:\n num_txt = ''.join(filter(str.isdigit, number_str))\n if num_txt:\n val =
int(num_txt)\n if val <= 100:\n number = val\n\n odds_str = clean_text(node_text(odds_node))\n if odds_node else ''\n\n
scratched = 'NR' in odds_str.upper() or 'NON-RUNNER' in node_text(node).upper()\n\n odds = {}\n win_odds = None\n
odds_source = None\n if not scratched:\n win_odds = parse_odds_to_decimal(odds_str)\n if win_odds is not None:\n odds_source =
'extracted'\n\n # Betting Forecast Fallback\n if win_odds is None and forecast_map and name.lower() in forecast_map:\n
win_odds = forecast_map[name.lower()]\n odds_source = 'betting_forecast'\n\n # Advanced heuristic fallback\n if win_odds is
None:\n win_odds = SmartOddsExtractor.extract_from_node(node)\n if win_odds is not None:\n odds_source =
'smart_extractor'\n\n if odds_data := create_odds_data(self.source_name, win_odds):\n odds[self.source_name] = odds_data\n\n
return Runner(number=number, name=name, odds=odds, win_odds=win_odds, odds_source=odds_source, scratched=scratched)\n except
Exception:\n self.logger.warning("Could not parse RacingPost runner, skipping.", exc_info=True)\n return None\n",
"name": "RacingPostAdapter"
},
{
"type": "miscellaneous",
"content": "\n\n"
},
{
"type": "class",
"content": "class RacingPostToteAdapter(BrowserHeadersMixin, DebugMixin, BaseAdapterV3):\n\n\n\n Adapter for fetching Tote
dividends and results from Racing Post.\n\n\n\n ADAPTER_TYPE = 'results'\n\n SOURCE_NAME = 'RacingPostTote'\n\n BASE_URL =
'https://www.racingpost.com'\n\n\n def __init__(self, config: Optional[Dict[str, Any]] = None):\n
super().__init__(source_name=self.SOURCE_NAME, base_url=self.BASE_URL, config=config)\n\n\n def _configure_fetch_strategy(self)
-> FetchStrategy:\n return FetchStrategy(\n primary_engine=BrowserEngine.CURL_CFFI,\n enable_js=True,\n
stealth_mode=StealthMode.CAMOUFLAGE,\n timeout=45\n )\n\n\n def _get_headers(self) -> dict:\n return
self._get_browser_headers(host='www.racingpost.com')\n\n\n async def _fetch_data(self, date: str) -> Optional[Dict[str,
Any]]:\n dt = parse_date_string(date)\n date_iso = dt.strftime("%Y-%m-%d")\n\n url = f"/results/{date_iso}"\n\n resp = await
self.make_request("GET", url, headers=self._get_headers())\n if not resp or not resp.text:\n return None\n\n
self._save_debug_snapshot(resp.text, f"rp_tote_results_{date}")\n\n parser = HTMLParser(resp.text)\n\n\n # Extract links to
individual race results\n links = set()\n selectors = [\n 'a[data-test-selector="RC-meetingItem__link_race"]',\n
'a[href*="/results/"]',\n '.ui-link.rp-raceCourse__panel_race_time',\n 'a.rp-raceCourse__panel_race_time'\n ]\n\n
target_venues = getattr(self, 'target_venues', None)\n\n for s in selectors:\n for a in parser.css(s):\n href =
a.attributes.get("href")\n if href:\n # Filter by venue\n if target_venues:\n match_found = False\n for v in
target_venues:\n if v in href.lower().replace("-", ""):\n match_found = True\n break\n if not match_found:\n v_text =
get_canonical_venue(node_text(a))\n if v_text in target_venues:\n match_found = True\n if not match_found:\n continue\n\n #
Broaden regex to match various RP result link patterns\n if re.search(r"/results/.*/", href) or \n\n\n
re.search(r"/results/\\d+/", href) or \n\n\n re.search(r"/\\d{4}-\\d{2}-\\d{2}/", href) or \n\n\n len(href.split("/")) >=
4:\n links.add(href if href.startswith("http") else f"{self.BASE_URL}{href}")\n\n\n async def _fetch_result_page(link):\n r =
await self.make_request("GET", link, headers=self._get_headers())\n return (link, r.text if r else "")\n\n\n tasks =
[fetch_result_page(link) for link in links]\n\n pages = await asyncio.gather(*tasks)\n return {"pages": pages, "date":
date}\n\n\n def _parse_races(self, raw_data: Any) -> List[Race]:\n if not raw_data or not raw_data.get("pages"):\n return
[]\n\n races = []\n date_str = raw_data["date"]\n\n for link, html_content in raw_data["pages"]:\n if not html_content:\n
continue\n\n try:\n parser = HTMLParser(html_content)\n race = self._parse_result_page(parser, date_str, link)\n if race:\n
races.append(race)\n\n except Exception as e:\n self.logger.warning("Failed to parse RP result page", link=link,
error=str(e))\n\n return races\n\n\n def _parse_result_page(self, parser: HTMLParser, date_str: str, url: str) ->
Optional[Race]:\n venue_node = (\n parser.css_first('*[data-test-selector="RC-courseHeader__name"]')\n or
parser.css_first('a[data-test-selector="RC-courseHeader__name"]')\n or
parser.css_first('a[data-test-selector="RC-course__name"]')\n )\n\n if not venue_node:\n return None\n\n venue =
normalize_venue_name(node_text(venue_node))\n\n\n time_node = (\n
parser.css_first('*[data-test-selector="RC-courseHeader__time"]')\n or
parser.css_first('span[data-test-selector="RC-courseHeader__time"]')\n or
parser.css_first('span[data-test-selector="RC-course__time"]')\n )\n\n if not time_node:\n return None\n\n time_str =
node_text(time_node)\n\n try:\n start_time = datetime.strptime(f"{date_str} {time_str}", f"{DATE_FORMAT}%H:%M").replace(tzinfo=EASTERN)\n\n except Exception:\n return None\n\n\n # Extract dividends\n dividends = {}\n tote_container =
parser.css_first('div[data-test-selector="RC-toteReturns"]')\n\n if not tote_container:\n # Try alternate selector\n
tote_container = parser.css_first('.rp-toteReturns')\n\n if tote_container:\n for row in
(tote_container.css('div.rp-toteReturns__row') or tote_container.css('.rp-toteReturns__row')):\n try:\n label_node =
row.css_first('div.rp-toteReturns__label') or row.css_first('.rp-toteReturns__label')\n val_node =
row.css_first('div.rp-toteReturns__value') or row.css_first('.rp-toteReturns__value')\n\n if label_node and val_node:\n label =
clean_text(node_text(label_node))\n value = clean_text(node_text(val_node))\n\n if label and value:\n dividends[label] = value\n
except Exception as e:\n self.logger.debug("Failed parsing RP tote row", error=str(e))\n\n\n\n\n # Extract runners
(finishers)\n runners = []\n\n # Try different row selectors for results\n runner_rows = (\n
parser.css('div[data-test-selector="RC-resultRunner"]')\n or parser.css('.RC-runnerRow')\n or
parser.css('.rp-horseTable__mainRow')\n )\n\n\n for row in runner_rows:\n name_node = (\n
row.css_first('a[data-test-selector="RC-resultRunnerName"]')\n or
row.css_first('*[data-test-selector="RC-cardPage-runnerName"]')\n or row.css_first('.RC-runnerName')\n or

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css_first('rp-horseTable__horse_name')\n\n if not name_node: continue\n name = clean_text(node_text(name_node))\n pos_node = (\n row.css_first('[data-test-selector=\"RC-cardPage-runnerPosition\"]')\n or\n row.css_first('span.rp-resultRunner_position')\n or row.css_first('.rp-horseTable__pos_number'))\n\n pos =\nclean_text(node_text(pos_node))\n if pos_node else \"?\"\n\n # Try to find saddle number\n number = 0\n num_node = (\n row.css_first('[data-test-selector=\"RC-cardPage-runnerNumber-no\"]')\n or row.css_first('.RC-runnerNumber_no'))\n or\n row.css_first('.rp-resultRunner_saddleClothNo'))\n\n or row.css_first('.rp-horseTable__saddleClothNo'))\n\n )\n\n if num_node:\n try: number = _safe_int(node_text(num_node))\n except Exception: pass\n\n # Extract SP (Starting Price) odds for audit\n comparison\n win_odds = None\n odds_source = None\n sp_node = (\n row.css_first('[data-test-selector=\"RC-cardPage-runnerPrice\"]')\n or row.css_first('.RC-runnerPrice'))\n or\n row.css_first('span[data-test-selector=\"RC-resultRunnerSP\"]')\n or row.css_first('.rp-resultRunner_sp'))\n\n or\n row.css_first('.rp-horseTable__horse_sp'))\n\n )\n\n if sp_node:\n win_odds =\nparsed_odds_to_decimal(clean_text(node_text(sp_node)))\n\n if win_odds is not None:\n odds_source = \"starting_price\"\n\n odds_data = {}\n\n if ov := create_odds_data(self.source_name, win_odds):\n odds_data[self.source_name] = ov\n\n runners.append(Runner(\n name=name,\n number=number,\n win_odds=win_odds,\n odds=odds_data,\n odds_source=odds_source,\n metadata={\"position\": pos}\n ))\n\n # Derive race number from header or navigation\n race_num = 1\n # Priority 1: Navigation bar active time (most reliable on RP)\n time_links = parser.css('a[data-test-selector=\"RC-raceTime\"]')\n found_in_nav = False\n\n for i, link in enumerate(time_links):\n cls = link.attributes.get(\"class\", \"\")\n\n if \"active\" in cls or\n \"rp-raceTimeCourseName__time\" in cls:\n race_num = i + 1\n found_in_nav = True\n break\n\n if not found_in_nav:\n # Priority 2: Text search for \"Race X\"\n race_num_match = re.search(r'Race\\s+(\\d+)', node_text(parser))\n\n if race_num_match:\n race_num = int(race_num_match.group(1))\n\n race = Race(\n id=f\"{rp_tote.get_canonical_venue(venue)}_{date_str.replace('-', '')}_R{race_num}\"\n , venue=venue,\n race_number=race_num,\n start_time=start_time,\n runners=runners,\n source=self.source_name,\n metadata={\"dividends\": dividends, \"url\": url}\n )\n\n return race\n\n\",\n \"name\": \"RacingPostToteAdapter\"\n ),\n {\n \"type\": \"miscellaneous\",\n \"content\": \"\\n# -----\\n# MASTER ORCHESTRATOR\\n# -----\\n\\n\"\n },\n {\n \"type\": \"async_function\",\n \"content\": \"async def run_discovery(\n target_dates: List[str],\n window_hours: Optional[int] = 8,\n loaded_races: Optional[List[Race]] = None,\n adapter_names: Optional[List[str]] = None,\n save_path: Optional[str] = None,\n fetch_only: bool = False,\n live_dashboard: bool = False,\n track_odds: bool = False,\n region: Optional[str] = None,\n config: Optional[Dict[str, Any]] = None,\n now: Optional[datetime] = None\n):\n logger = structlog.get_logger(\"run_discovery\")\n logger.info(\"Running Discovery\")\n dates=target_dates,\n window_hours=window_hours)\n db = FortunaDB()\n await db.initialize()\n\n try:\n if now is None:\n now = datetime.now(EASTERN)\n cutoff = now + timedelta(hours=window_hours)\n\n if window_hours else None\n\n all_races_raw = []\n harvest_summary = {}\n\n # Pre-populate harvest_summary based on region/filter for visibility\n target_region = region or DEFAULT_REGION\n\n if target_region == \"USA\":\n target_set = USA_DISCOVERY_ADAPTERS\n elif target_region == \"INT\":\n target_set = INT_DISCOVERY_ADAPTERS\n else:\n target_set = GLOBAL_DISCOVERY_ADAPTERS\n\n # Determine which adapters should be visible in the harvest summary\n if adapter_names:\n visible_adapters = [n for n in adapter_names if n in target_set]\n else:\n visible_adapters = list(target_set)\n\n for adapter_name in visible_adapters:\n harvest_summary[adapter_name] = {\"count\": 0, \"max_odds\": 0.0, \"trust_ratio\": 0.0}\n\n if loaded_races is not None:\n logger.info(\"Using loaded races\", count=len(loaded_races))\n all_races_raw = loaded_races\n\n adapters = []\n\n # Ensure harvest files exist even for loaded runs\n try:\n harvest_file = get_writable_path(f\"discovery_harvest.json\")\n\n if not harvest_file.exists():\n with open(harvest_file, \"w\") as f:\n json.dump(harvest_summary, f)\n\n except Exception: pass\n\n else:\n # Auto-discover discovery adapter classes\n adapter_classes = get_discovery_adapter_classes()\n\n if adapter_names:\n adapter_classes = [c for c in adapter_classes if c.__name__ in adapter_names or getattr(c, \"SOURCE_NAME\", \"\") in adapter_names]\n\n # Load historical performance scores to prioritize adapters\n adapter_scores = await db.get_adapter_scores(days=30)\n\n # Prioritize adapters by score (descending), with name as deterministic tiebreaker\n adapter_classes = sorted(adapter_classes, key=lambda c: (-adapter_scores.get(getattr(c, \"SOURCE_NAME\", c.__name__), 0),\n getattr(c, \"SOURCE_NAME\", c.__name__)))\n\n )\n\n # Get adapter-specific configs from global config (GPT5 Improvement)\n adapter_configs = config.get(\"adapters\", {})\n\n if config else {}\n\n adapters = []\n\n for cls in adapter_classes:\n try:\n name = cls.SOURCE_NAME if hasattr(cls, \"SOURCE_NAME\") else cls.__name__\n specific_config = adapter_configs.get(name, {}).copy()\n\n # Use copy to avoid shared mutation\n # Merge with basic region config\n specific_config.update({\"region\": region})\n adapters.append(cls(config=specific_config))\n\n # Optimization: Removed dynamic doubling of mobile adapters to reduce noise/timeouts (Item 7)\n\n except Exception as e:\n logger.error(\"Failed to initialize adapter\", adapter=cls.__name__, error=str(e))\n\n try:\n async def fetch_one(a, date_str):\n try:\n races = await a.get_races(date_str)\n\n return a.source_name, races\n\n except Exception as e:\n logger.error(\"Error fetching from adapter\", adapter=a.source_name, date=date_str, error=str(e))\n\n return a.source_name, [],\n\n fetch_tasks = []\n\n for d in target_dates:\n for a in adapters:\n fetch_tasks.append(fetch_one(a, d))\n\n results = await asyncio.gather(*fetch_tasks)\n\n for adapter_name, r_list in results:\n all_races_raw.extend(r_list)\n\n # Track count and MaxOdds (Proxy for successful odds fetching)\n m_odds = 0.0\n\n for r in r_list:\n for run in r.runners:\n if run.win_odds and run.win_odds > m_odds:\n m_odds = float(run.win_odds)\n\n if adapter_name not in harvest_summary:\n harvest_summary[adapter_name] = {\"count\": 0, \"max_odds\": 0.0}\n\n harvest_summary[adapter_name][\"count\"] += len(r_list)\n\n if m_odds > harvest_summary[adapter_name][\"max_odds\"]:\n harvest_summary[adapter_name][\"max_odds\"] = m_odds\n\n # Find the adapter instance to extract its trust_ratio\n matching_adapter = next((a for a in adapters if a.source_name == adapter_name), None)\n\n if matching_adapter:\n harvest_summary[adapter_name][\"trust_ratio\"] = max((n.harvest_summary[adapter_name].get(\"trust_ratio\", 0.0),\n getattr(matching_adapter, \"trust_ratio\", 0.0))\n )\n\n )\n\n logger.info(\"Fetched total races\", count=len(all_races_raw))\n\n finally:\n # Save discovery harvest summary for GHA reporting and DB persistence\n try:\n harvest_file = get_writable_path(f\"discovery_harvest.json\")\n\n if not exist or we have data\n if harvest_summary or not harvest_file.exists():\n with open(harvest_file, \"w\") as f:\n json.dump(harvest_summary, f)\n\n if harvest_summary:\n await db.log_harvest(harvest_summary, region=region)\n\n except Exception: pass\n\n # Shutdown adapters\n\n for a in adapters:\n try:\n await a.close()\n\n except Exception: pass\n\n # Apply time window filter if requested to avoid overloading\n\n # Initial time window filtering removed to ensure all unique races are tracked for reporting\n\n # Resilience check (FIX_10)\n adapter_success_counts = {name: data['count'] for name, data in harvest_summary.items() if isinstance(data, dict) and data.get('count', 0) > 0}\n\n active_adapters = list(adapter_success_counts.keys())\n\n total_fetched = sum(adapter_success_counts.values())\n\n if not all_races_raw:\n logger.error(\"No races fetched from any adapter. Discovery aborted.\")\n\n if save_path:\n try:\n target_save = get_writable_path(save_path)\n\n with open(target_save, \"w\") as f:\n json.dump([], f)\n\n logger.info(\"Saved empty race list to file\", path=str(target_save))\n\n except Exception as e:\n logger.error(\"Failed to save empty race list\", error=str(e))\n\n return\n\n if len(active_adapters) == 1 and total_fetched < 20:\n logger.critical(\"DISCOVERY DEGRADED: only one adapter returned data. Results may be unreliable.\",\n adapter=active_adapters[0], count=total_fetched)\n\n # Deduplicate\n race_map = {}\n\n for race in all_races_raw:\n canonical_venue = get_canonical_venue(race.venue)\n\n # Use Canonical Venue + Race Number + Date + Discipline as stable key\n st = race.start_time\n\n if isinstance(st, str):\n try:\n st = from_storage_format(st.replace('Z', '+00:00'))\n\n except (ValueError,
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TypeError):\n pass\n\n n date_str = st.strftime('%Y%m%d') if hasattr(st, 'strftime') else \"Unknown\"\n\n # Include discipline in key to avoid misclassification\n n key = f\"{{canonical_venue}}|{race.race_number}|{date_str}|{race.discipline}\" \n\n # If key not in race_map:\n n race_map[key] = race\n\n else:\n n existing = race_map[key]\n\n # Merge runners/odds/nr for nr in race.runners:\n n Match by number OR name (if numbers are missing)\n\n er = next((r for r in existing.runners if (r.number != 0 and r.number == nr.number) or (r.name.lower() == nr.name.lower()))\n\n None)\n\n if er:\n\n for source, odds_data in nr.odds.items():\n\n if source not in er.odds[source]:\n\n er.odds[source] = odds_data\n\n continue\n\n existing_odds = er.odds[source]\n\n new_ts = getattr(odds_data, 'last_updated', None)\n\n old_ts = getattr(existing_odds, 'last_updated', None)\n\n if new_ts and old_ts and new_ts > old_ts:\n\n er.odds[source] = odds_data\n\n\n if not er.win_odds and nr.win_odds:\n\n er.win_odds = nr.win_odds\n\n if not er.number and nr.number:\n\n er.number = nr.number\n\n else:\n\n existing.runners.append(nr)\n\n\n Update source\n\n sources = set((existing.source or \"\")\n\n .split(\"\", \" \"))\n\n sources.add(race.source or \"Unknown\")\n\n existing.source = \"\", \"\".join(sorted(list(filter(None, sources))))\n\n\n unique_races = list(race_map.values())\n\n logger.info(\"Unique races identified\", count=len(unique_races))\n\n\n # GPT5 Improvement: Keep all races within window for analysis, not just one per track.\n\n # Window broadened to 18 hours to match grid cutoff (News Mode)\n\n timing_window_races = []\n\n n now = datetime.now(EASTERN)\n\n for race in unique_races:\n\n st = race.start_time\n\n if isinstance(st, str):\n\n try:\n\n st = from_storage_format(st.replace('Z', '+00:00'))\n\n except (ValueError, TypeError):\n\n continue\n\n if st.tzinfo is None:\n\n st = st.replace(tzinfo=EASTERN)\n\n\n # Calculate Minutes to Post\n\n diff = st - now\n\n mtp = diff.total_seconds() / 60\n\n\n # Timing window limited to 8 hours to ensure yield is audit-able\n\n if -45 < mtp <= 480:\n\n # 8 hours = 480 mins\n\n timing_window_races.append(race)\n\n if mtp <= 45:\n\n logger.info(f\" \\ud83d\\udcb0 Found Gold Candidate: {race.venue} R{race.race_number} ({mtp:.1f} MTP)\\")\n\n else:\n\n logger.debug(f\" \\ud83d\\udc2d Found Upcoming Candidate: {race.venue} R{race.race_number} ({mtp:.1f} MTP)\\")\n\n\n golden_zone_races = timing_window_races\n\n if not golden_zone_races:\n\n logger.warning(f\" \\ud83d\\udd2d No races found in the broadened window (-45m to 8h).\\")\n\n\n logger.info(\"Total unique races available for analysis\", count=len(unique_races))\n\n\n # Save raw fetched/merged races if requested (Save EVERYTHING unique)\n\n if save_path:\n\n try:\n\n target_save = get_writable_path(save_path)\n\n with open(target_save, 'w') as f:\n\n json.dump([r.model_dump(mode='json') for r in unique_races], f, indent=4)\n\n logger.info(\"Saved all unique races to file\", path=str(target_save))\n\n except Exception as e:\n\n logger.error(\"Failed to save races\", error=str(e))\n\n\n if fetch_only:\n\n logger.info(\"Fetch-only mode active. Skipping analysis and reporting.\\")\n\n return\n\n\n # Analyze ALL unique races to ensure Grid is populated with Top 5 info (News Mode)\n\n analyzer = SimplySuccessAnalyzer(config=config)\n\n result = analyzer.qualify_races(unique_races, now=now)\n\n qualified = result.get(\"races\", [])\n\n\n # Generate Grid & Goldmine (Grid uses unique_races for the broader context)\n\n grid = generate_summary_grid(qualified, all_races=unique_races)\n\n logger.info(\"Summary Grid Generated\\")\n\n\n # Generate Field Matrix for all unique races\n\n field_matrix = generate_field_matrix(unique_races)\n\n logger.info(\"Field Matrix Generated\\")\n\n\n # Log Hot Tips & Fetch recent historical results for the report\n\n tracker = HotTipsTracker(config=config)\n\n await tracker.log_tips(qualified)\n\n\n historical_goldmines = await tracker.db.get_recent_audited_goldmines(limit=15)\n\n historical_report = generate_historical_goldmine_report(historical_goldmines)\n\n\n gm_report = generate_goldmine_report(qualified, all_races=unique_races)\n\n if historical_report:\n\n gm_report += \"\\n\\n\" + historical_report\n\n\n # NEW: Dashboard and Live Tracking\n\n goldmines = [r for r in qualified if get_field(r, 'metadata', {}).get('is_goldmine')]\n\n\n # Calculate today's stats for dashboard\n\n recent_tips = await tracker.db.get_recent_tips(limit=100)\n\n today_start = datetime.now(EASTERN).strftime(DATE_FORMAT)\n\n today_tips = [t for t in recent_tips if t.get(\"report_date\", \"\").startswith(today_start)]\n\n\n cached = sum(1 for t in today_tips if t.get(\"verdict\") == \"CASHED\")\n\n total_tips = len(today_tips)\n\n profit = sum((t.get(\"net_profit\") or 0.0) for t in today_tips)\n\n\n stats = {\n\n \"tips\": total_tips,\n\n \"cached\": cached,\n\n \"profit\": profit\n\n }\n\n\n # Generate friendly HTML report\n\n n try:\n\n html_content = await generate_friendly_html_report(qualified, stats)\n\n html_path = get_writable_path(\"fortuna_report.html\")\n\n html_path.write_text(html_content, encoding='utf-8')\n\n logger.info(\"Friendly HTML report generated\", path=str(html_path))\n\n\n # Launch the report if running as a portable app (not in GHA)\n\n if not os.getenv(\"GITHUB_ACTIONS\"):\n\n n try:\n\n Use absolute path for reliable opening\n\n abs_path = html_path.absolute()\n\n if sys.platform == \"win32\":\n\n os.startfile(abs_path)\n\n else:\n\n webbrowser.open(f\"file://{abs_path}\\")\n\n except Exception as e:\n\n logger.warning(\"Failed to automatically launch report\", error=str(e))\n\n except Exception as e:\n\n logger.error(\"Failed to generate HTML report\", error=str(e))\n\n\n if live_dashboard:\n\n n try:\n\n import Live\n\n import Live\n\n from rich.console import Console\n\n # Check if our custom dashboard exists\n\n n try:\n\n from dashboard import FortunaDashboard\n\n dash = FortunaDashboard()\n\n dash.update(goldmines, stats)\n\n\n # Start odds tracker if requested\n\n if track_odds:\n\n n try:\n\n from odds_tracker import LiveOddsTracker\n\n adapter_classes = get_discovery_adapter_classes()\n\n odds_tracker = LiveOddsTracker(goldmines, adapter_classes)\n\n asyncio.create_task(odds_tracker.start_tracking())\n\n except ImportError:\n\n logger.warning(\"LiveOddsTracker not available\")\n\n\n await dash.run_live()\n\n except (ImportError, Exception) as e:\n\n logger.warning(f\"Rich dashboard component missing or failed: {e}\\")\n\n\n # Fallback to simple rich display if possible\n\n console = Console()\n\n console.print(\"\\n\\n\" + grid + \"\\n\\n\")\n\n except ImportError:\n\n logger.warning(\"Rich library not available, falling back to static display\\")\n\n print(\"\\n\\n\" + grid + \"\\n\\n\")\n\n else:\n\n # Fallback to static print\n\n n try:\n\n from dashboard import print_dashboard\n\n print_dashboard(goldmines, stats)\n\n except Exception as e:\n\n # Silently fallback to standard print if dashboard fails\n\n pass\n\n print(\"\\n\\n\" + grid + \"\\n\\n\")\n\n if historical_report:\n\n print(\"\\n\\n\" + historical_report + \"\\n\\n\")\n\n\n # Always save reports to files (GPT5 Improvement: Defensive guards)\n\n n try:\n\n with open(get_writable_path(\"summary_grid.txt\"), 'w') as f:\n\n f.write(grid)\n\n with open(get_writable_path(\"field_matrix.txt\"), 'w') as f:\n\n f.write(field_matrix)\n\n with open(get_writable_path(\"goldmine_report.txt\"), 'w') as f:\n\n f.write(gm_report)\n\n except Exception as e:\n\n logger.error(\"failed_saving_text_reports\", error=str(e))\n\n\n # Save qualified races to JSON using atomic write (Improvement 1)\n\n report_data = {\n\n \"races\": [r.model_dump(mode='json') for r in qualified],\n\n \"analysis_metadata\": result.get(\"criteria\", {}),\n\n \"timestamp\": to_storage_format(datetime.now(EASTERN)),\n\n }\n\n qualified_path = get_writable_path(\"qualified_races.json\")\n\n temp_path = qualified_path.with_suffix('.tmp')\n\n n try:\n\n with open(temp_path, 'w') as f:\n\n json.dump(report_data, f, indent=4)\n\n f.flush()\n\n os.fsync(f.fileno())\n\n temp_path.replace(qualified_path)\n\n\n # Record freshness in GHA output\n\n is_fresh = validate_artifact_freshness(str(qualified_path))\n\n write_github_output(\"qualified_fresh\", \"1\" if is_fresh else \"0\")\n\n write_github_output(\"qualified_count\", len(qualified))\n\n except Exception as e:\n\n logger.error(\"failed_saving_qualified_races\", error=str(e))\n\n\n # NEW: Write GHA Job Summary\n\n if 'GITHUB_STEP_SUMMARY' in os.environ:\n\n n try:\n\n predictions_md = format_predictions_section(qualified)\n\n # We need a db instance for format_proof_section\n\n proof_md = await format_proof_section(tracker.db)\n\n harvest_md = build_harvest_table(harvest_summary, \"\\ud83d\\ude0f Discovery Harvest Performance\")\n\n artifacts_md = format_artifact_links()\n\n write_job_summary(predictions_md, harvest_md, proof_md, artifacts_md)\n\n logger.info(\"GHA Job Summary written\\")\n\n except Exception as e:\n\n logger.error(\"Failed to write GHA summary\", error=str(e))\n\n finally:\n\n await GlobalResourceManager.cleanup()\n\n\n name: \"run_discovery\"},\n\n {\n\n \"type\": \"async_function\", \"content\": \"async def start_desktop_app():\n\n \\\"\\\"\\\"Starts a FastAPI server and opens a webview window for the Fortuna Dashboard.\\\"\\\"\\\"\\n\n\n try:\n\n import uvicorn\n\n from fastapi import FastAPI\n\n from fastapi.responses import HTMLResponse\n\n import webview\n\n import threading\n\n import time\n\n except ImportError as e:\n\n print(f\"GUI dependencies missing: {e}. Install with pip install fastapi uvicorn pywebview\\\")\n\n return\n\n\n app = FastAPI(title=\"Fortuna Desktop Intelligence\")\n\n\n @app.get(\"/\")\n\n response_class=HTMLResponse)\n\n async def get_dashboard():\n\n # Retrieve latest Goldmines from the database\n\n db
```

```
= FortunaDB()\n try:\n async with db.get_connection() as conn:\n try:\n async with conn.execute(\n \"SELECT venue,
race_number, selection_number, predicted_2nd_fav_odds, start_time \"\n \"FROM tips ORDER BY id DESC LIMIT 50\"\n ) as
cursor:\n tips = await cursor.fetchall()\n except Exception as e:\n print(f\"DB query failed: {e}\")\n tips = []\n except
Exception as e:\n print(f\"Failed to connect to database: {e}\")\n tips = []\n\n tips_html = \"\".join([\n
f\"<tr><td>{t[4]}</td><td>{t[0]}</td><td>R{t[1]}</td><td>#{t[2]}</td><td>{t[3]}</td></tr>\"\n for t in tips\n ])\n\n return
f\"<html>\n <head>\n <title>Fortuna Intelligence Desktop</title>\n <style>\n body {{ font-family: 'Segoe UI', Tahoma,
Geneva, Verdana, sans-serif; background: #0f172a; color: #f8fafc; padding: 30px; }}\n .container {{ max-width: 1200px; margin:
auto; }}\n h1 {{ color: #fbbf24; border-bottom: 2px solid #fbbf24; padding-bottom: 10px; text-transform: uppercase;
letter-spacing: 2px; }}\n table {{ width: 100%; border-collapse: collapse; margin-top: 20px; background: #1e293b;
border-radius: 8px; overflow: hidden; }}\n th, td {{ padding: 15px; text-align: left; border-bottom: 1px solid #334155; }}\n
th {{ background: #334155; color: #fbbf24; }}\n tr:hover {{ background: #475569; }}\n .footer {{ margin-top: 30px; font-size:
0.8em; color: #94a3b8; text-align: center; }}\n .btn {{ display: inline-block; background: #fbbf24; color: #0f172a; padding:
10px 20px; border-radius: 5px; text-decoration: none; font-weight: bold; margin-bottom: 20px; }}\n </style>\n <script>\n
setTimeout(() => {{ location.reload(); }}, 30000);\n </script>\n </head>\n <body>\n <div class=\"container\"\n >\n <h1>Fortuna
Intelligence Dashboard</h1>\n <p>Monitoring global racing markets for Goldmine opportunities...</p>\n <a href=\"/\n
class=\"btn\">REFRESH NOW</a>\n <table>\n <thead>\n <tr><th>Time
Discovered</th><th>Venue</th><th>Race</th><th>Selection</th><th>Odds</th></tr>\n </thead>\n <tbody>\n {tips_html or \"<tr><td
colspan='5'>No opportunities found yet. Run discovery to populate the database.</td></tr>\"}\n </tbody>\n </table>\n <div
class=\"footer\">Fortuna Intelligence Monolith - Sci-Fi Future Edition - Auto-refreshing every 30s</div>\n </div>\n </body>\n
</html>\n \"\".\n\n def run_server():\n uvicorn.run(app, host=\"127.0.0.1\", port=8013, log_level=\"error\")\n\n # Start
FastAPI in a background thread\n server_thread = threading.Thread(target=run_server, daemon=True)\n server_thread.start()\n\n # Wait a moment for server to initialize\n time.sleep(2.0)\n\n # Create and start the webview window if server is up\n if
server_thread.is_alive():\n print(\"Launching Fortuna Desktop Window...\")\n webview.create_window('Fortuna Intelligence
Desktop', 'http://127.0.0.1:8013', width=1300, height=900)\n webview.start()\n else:\n print(\"u26a0ufe0f Error: GUI Server
failed to start.\")\n\n
\"name\": \"start_desktop_app\"
},
{
\"type\": \"miscellaneous\",
\"content\": \"\n\"
},
{
\"type\": \"async_function\",
\"content\": \"async def ensure_browsers(force_install: bool = False):\n \"\"\"Ensure browser dependencies are available for
scraping.\"\"\"\n\n # Skip Playwright in frozen apps if binary doesn't exist - use HTTP-only adapters\n if is_frozen():\n
playwright_path = os.path.expanduser(\"~\\\\\\\\AppData\\\\\\\\Local\\\\\\\\ms-playwright\\\\\")\n if not os.path.exists(playwright_path) and
platform.system() == 'Windows':\n structlog.get_logger().info(\"Running as frozen app - Playwright disabled (binary not
found)\")\n return True\n\n try:\n # Check if playwright is installed and has a chromium binary\n from playwright.async_api
import async_playwright\n async with async_playwright() as p:\n try:\n # We try to launch a headless browser to verify
installation\n browser = await p.chromium.launch(headless=True)\n await browser.close()\n return True\n except Exception as
e:\n structlog.get_logger().debug(\"Playwright launch failed during verification\", error=str(e))\n if is_frozen():\n
structlog.get_logger().info(\"Frozen app: Playwright launch failed, using HTTP-only fallbacks\")\n return True\n except
ImportError:\n structlog.get_logger().debug(\"Playwright not imported\")\n if is_frozen():\n return True\n\n if is_frozen():\n
return True\n\n # GPT5 Improvement: Instead of auto-installing, warn the user unless opt-in\n # For now, we will assume it's
NOT opt-in and ask for manual installation\n # because auto-pip-installing can be surprising.\n
structlog.get_logger().warning(\"Browser dependencies (Playwright Chromium) missing.\")\n print(\"\\nBrowser dependencies
missing!\")\n print(\"To use browser-based adapters, please run:\")\n print(f\" {sys.executable} -m pip install
playwright==1.49.1\")\n print(f\" {sys.executable} -m playwright install chromium\")\n print(\"Alternatively, run Fortuna
with: --install-browsers\")\n\n # Check if we should auto-install via flag or environment variable\n if force_install or
os.getenv(\"FORTUNA_AUTO_INSTALL_BROWSERS\") == \"1\":\n structlog.get_logger().info(\"Auto-installing browser dependencies as
requested...\")\n try:\n # Remove version pin to avoid conflicts\n subprocess.run([sys.executable, \"-m\", \"pip\",
\"install\", \"playwright\"], check=True, capture_output=True, text=True)\n subprocess.run([sys.executable, \"-m\",
\"playwright\", \"install\", \"chromium\"], check=True, capture_output=True, text=True)\n
structlog.get_logger().info(\"Browser dependencies installed successfully.\")\n return True\n except
subprocess.CalledProcessError as e:\n structlog.get_logger().error(\"Failed to auto-install browsers\", error=str(e))\n return
False\n\n return True\n # Continue with HTTP-only adapters\n\",
\"name\": \"ensure_browsers\"
},
{
\"type\": \"miscellaneous\",
\"content\": \"\n\"
},
{
\"type\": \"async_function\",
\"content\": \"async def handle_early_exit(args: argparse.Namespace, config: Dict[str, Any]) -> bool:\n \"\"\"Handles CLI
arguments that should trigger an immediate exit (GPT5 Improvement).\"\"\"\n\n if args.quick_help:\n print_quick_help()\n return
True\n if args.status:\n print_status_card(config)\n return True\n if args.show_log:\n await print_recent_logs()\n return
True\n if args.open_dashboard:\n open_report_in_browser()\n return True\n return False\n\",
\"name\": \"handle_early_exit_args\"
},
{
\"type\": \"miscellaneous\",
\"content\": \"\n\"
},
{
\"type\": \"async_function\",
\"content\": \"async def main_all_in_one():\n # Configure logging at the start of main\n structlog.configure(\n
wrapper_class=structlog.make_filtering_bound_logger(logging.INFO)\n )\n # Ensure DB path env is set if passed via argument or
already in environment\n # Actually, we should probably add a --db-path arg here too for parity with analytics\n config =
load_config()\n logger = structlog.get_logger(\"main\")\n parser = argparse.ArgumentParser(description=\"Fortuna All-In-One -
Professional Racing Intelligence\")\n parser.add_argument(\"--date\", type=str, help=\"Target date (YYYYMMDD)\")\n
parser.add_argument(\"--hours\", type=int, default=8, help=\"Discovery time window in hours (default: 8)\")\n
parser.add_argument(\"--monitor\", action=\"store_true\", help=\"Run in monitor mode\")\n parser.add_argument(\"--once\",
action=\"store_true\", help=\"Run monitor once\")\n parser.add_argument(\"--region\", type=str, choices=[\"USA\", \"INT\",
\"GLOBAL\"], help=\"Filter by region (USA, INT or GLOBAL)\")\n parser.add_argument(\"--quality\", choices=[\"solid\",
```

